



Worlds To Discover

**Students, Teachers
and Communities
Learning Together**

**Grants For Teachers and
Schools Program**

The Philadelphia Education Fund

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The PATHS/PRISM Grants for Teachers and Schools Program

School reform ultimately depends on the ideas and classroom practices of teachers themselves. Guided by this belief, PATHS/PRISM has awarded more than a million dollars for nearly a thousand projects in its Grants for Teachers and Schools Program since its founding as a public education fund in 1984. This initiative, funded by the School District of Philadelphia, the Philadelphia Federation of Teachers, The Pew Charitable Trusts, and the ARCO Chemical Company, was one of PATHS/PRISM's most visible efforts supporting teachers' professional growth. Now renamed The Philadelphia Education Fund after its 1995 merger with the Philadelphia Schools Collaborative, the organization intends to continue the grants concept within the framework of projects supporting "Children Achieving," Superintendent David W. Hornbeck's 10 point plan for systemic reform in the School District of Philadelphia.

Since 1984, these grants to individual teachers and groups of teachers in the District, generally between \$300 and \$3000, sparked educational innovations in 84 percent of the District's schools. While the program encouraged teachers and schools to explore and address a wide range of topics, the program's primary goals have centered on the following:

- To encourage teachers to develop and disseminate new instructional materials and strategies;
- To supplement teachers' instructional materials;
- To enable teachers to take initial steps in becoming teacher leaders;
- To encourage collaboration among teachers at the same school site;
- To facilitate rapid response at the school level to educational priorities put forth by the District;
- To provide information on teachers' priorities for changing instruction;
- To develop a relationship with schools not previously involved in PATHS/PRISM programs.

As a result of their grant experience, large numbers of teachers have become key players in the expanding cadre of teacher leaders and innovators in the School District of Philadelphia.

Projects have blossomed into whole-school renewal efforts in several elementary schools.

Research on Grants

This publication describes 100 grants that the Philadelphia Education Fund has identified as particularly exemplary and worthy of replication. The selection process was part of a broader research project evaluating the Grants Program. The research examined themes and trends in the program over its eleven-year history, its impact on teachers, and the obstacles encountered by participants. Evidence for the study's findings came from internal documents of PATHS/PRISM, including grant applications and evaluation materials from all of the 987 grants awarded; interviews with former and current Philadelphia Education Fund staff; and observation of the 1994-95 grant review session.

Impact of the Grants Program

The Grants Program has facilitated school reform efforts in several ways. Many of the projects have been continued once funding ceased and have been disseminated beyond the classrooms of the original grant recipients. Such projects include those that originally funded the purchase of: scientific equipment, including greenhouse and hydroponic units; multiple book titles and classroom sets of "real literature" books; and resource materials to support historical research. These projects have, in some cases, led to the development of community outreach programs at the school site and to student involvement in regional or district-wide science competitions and displays. Professional Development Workshops and colloquia series funded by PATHS/PRISM have served to disseminate ideas and materials across the District. In addition, collaborative grants to groups of teachers in a school have led to school-wide curricular projects at some sites.

Some teachers have been successful in parlaying their small grant projects into much larger initiatives supported by other external funders or by PATHS/PRISM. For example, Rosemaria McNeil, formerly a teacher at Sulzberger Middle School, succeeded in expanding a grant project into a \$1.2 million grant from the Quasar Project supported by the Ford Foundation. Doug Wildasin, a Biology teacher at Strawberry Mansion High School, built on student-centered science projects supported by grant funds to much more extensive science fair activities funded by the National Science Foundation. Grants-funded projects have blossomed into whole-school renewal efforts in several elementary schools such as Powel, H.A. Brown, and Harrington.

Teacher leadership has been seeded by the Grants Program. Many teachers took their first steps in grant-writing and in dissemination activities through their small grant and went on to participate in more intensive professional development programs through PATHS/PRISM or other organizations. Many have now assumed key positions among professional development provider networks and have become skilled at raising money from external sources in order to continue existing programs or develop new programs for students and teachers.

The Grants for Teachers and Schools program was an effective communication vehicle for alerting PATHS/PRISM staff to Philadelphia teachers' emerging interests in particular curricular areas. The organization responded to the interest represented in teachers' grant applications by creating summer institutes and other workshops in popular topic areas. An example of this impact is the Good Books for Great Kids summer institutes that were developed to respond to teachers' interest in Whole Language programs for elementary-aged children.

Trends in Grants by Curriculum Area and School Level

Certain trends in the distribution of grant funds across curriculum areas and grade levels are apparent from an examination of all 987 grants awarded from 1984-1995. Overall, topics in the humanities were funded in greater numbers than in the math/science area or in interdisciplinary work. Language arts received one-fourth of the awards (26 percent) which, together with grants in social studies (12 percent), the arts (9 percent), and foreign language (1 percent) accounted for 47 percent of the awards. Science grants accounted for 19 percent of the total with math and computer technology garnering another 15 percent. Eighteen percent of the grants could be described as interdisciplinary and/or thematic in their focus. In the Grants for Teachers and Schools program, the term "interdisciplinary" has been reserved for projects which include both humanities *and* science/math components; in some years, eligibility for higher funding levels was an added inducement to design such a project.

The topic areas of the grants awarded over the decade shifted in several significant ways. The number and proportion of language arts grants decreased as thematic work increased. These thematic projects integrated language arts into other subject areas. And the

introduction of word processing technology accelerated the integration of writing and reading across disciplines.

There was a marked response to the National Council of Teachers of Mathematics (NCTM) curriculum standards after they were published in 1989. Numerous grants were designed by teachers to apply the standards in the classroom. Projects with multi-cultural curricular themes increased, many of which established ties to parent groups and cultural organizations.

Top Grant-Receiving Schools by School Level

Elementary

J.B. Kelly	20
Fairhill	17
Hunter	16
Powel	15
Lingelbach	14
Moffet	14
Hanna	13
F. Douglass	12

Middle

Stetson	20
Clemente	13
Beeber	6
Harding	6
Penn Treaty	6
Sulzberger	5
Wanamaker	5

High

Central	21
Edison	17
Lincoln	15
W. Philadelphia	14
Franklin	11
S. Philadelphia	10
University City	9
Girls	9

	Number of Grants	Percentage of Total
Language Arts	240	26%
Social Studies	111	12%
Arts	79	9%
Foreign Language	12	1%
Interdisciplinary	72	8%
Thematic	91	10%
Science	178	19%
Math	94	10%
Computer Technology	49	5%

Interest in Whole Language activities remained strong throughout the life of the Grants Program, but was given a boost when desktop publishing software enabled teachers to publish students' writing with relative ease. Another consistent trend in grants' awards was teachers' propensity to apply in topic areas related to their participation in other PATHS/PRISM programs such as Good Books for Great Kids or the Shakespeare Colloquia. Grant themes clearly been influenced by outreach activities and workshops conducted by PATHS/PRISM.

Elementary school teachers received more than half (56 percent) of the grants, with 17 percent going to middle school teachers and 22 percent to high school teachers. (One to three percent of the grants were awarded to schools with other grade configurations.) Variations in awards by school level have narrowed in recent years.

The great majority of public schools in Philadelphia, 84 percent, were awarded at least one grant. Generally speaking, grants were

	Number of Grants	Percentage of Total
Elementary School	515	56%
Elementary/Middle School	32	3%
Elem./Middle/High School	12	1%
Middle School	155	17%
Middle/High School	10	1%
High School	202	22%

concentrated in high poverty areas of the city, particularly in the Central West and Central East regions of the School District. Certain schools were unusually successful in receiving grants such as J.B. Kelly and Fairhill Elementary Schools, Stetson and Clemente Middle Schools, and Edison and Central High Schools.

Funding and Category Patterns

The total annual amount of grant funds, the average grant award, as well as the categories of grants changed over the years. The largest number of grants were awarded in the years between 1987-88 and 1990-91, averaging 134 annually. Since that time, an average of 70 grants per year have been awarded. The types of grants available changed from year to year. Project categories included grants to individual teachers, collaborative grants to groups of teachers, dissemination grants to individuals to replicate a previously successful project while producing a "package" of materials and guidelines to make the project replicable to colleagues, introductory grants to teachers who had not previously had a grant, and focus grants targeted to start pilot programs in such areas as making community connections with schools. In the first year of the program (1984-85), no limit was set and some projects were funded for several thousand dollars. In subsequent years, as categories evolved, limits of \$300 and then \$500 were set for individual grants, while up to \$3,000 was awarded to teams of collaborating teachers.

Obstacles to Implementation

Several impediments to implementation emerged repeatedly in grant recipients' final evaluations of their projects. Teachers often underestimated the time and money needed to complete grant

PATHS/PRISM awarded more than a million dollars for nearly a thousand projects since its founding in 1984.

As the school themselves become the locus of change, the fruits of these modest expenditures will become more apparent.

activities. Project timelines had to be revised when materials were ordered late or arrived on a slower schedule than expected. The cost of materials often exceeded teachers' estimates, and the consequent ordering of substitute products slowed down implementation. Transfers of collaborating teachers impeded the launching of activities as did the difficulty of contacting selected consultants. The need for planning time among teachers tended to be greater than teachers anticipated, prompting some to recommend that clear schedules for collaboration and consultation among participants be established.

It should be noted that while these obstacles were irritants, they did not cause projects to be abandoned or significantly curtailed.

The Role of Grants in Systemic School Reform

Grants for Teachers and Schools was a low-profile program yet it contributed in powerful ways to reform efforts at the school and district levels. Through the extensive work and results of the following projects, the Grants for Teachers program consistently modeled and exemplified the founding premise of the Philadelphia Education Fund: Teacher-generated initiatives can and do facilitate change in teaching and learning because the teachers themselves are deeply committed to the implementation of their projects. Their grass-roots exploratory efforts constitute a rich form of professional development in which both the teachers and their students are learners. Large numbers of teachers emerged from their grant experience with a thirst for more intensive research and development opportunities, and subsequently moved on to more ambitious professional development initiatives. As a result, they became key players in the expanding cadre of teacher leaders and innovators across the School District of Philadelphia.

As the District undertakes a range of initiatives associated with "Children Achieving," including site-based management, the adoption of new curricular standards and assessments, and intensive professional development, the presence of this core of teacher leaders will boost the prospects for systemic change. School and cluster councils, for example, will be reliant on the skill and knowledge of teachers in selecting and organizing professional development opportunities. A reading of the following program descriptions of the exemplary grants shows how grant-supported teachers have formed ties to outside speakers

and cultural institutions and to other professional groups. Their sophistication about resources and their ties to educational networks will facilitate the efforts of school councils to make informed choices about expenditures for school improvement initiatives.

The Grants for Teachers and Schools Program has had a long-term impact in seeding school renewal in the School District of Philadelphia. With the implementation of Superintendent David Hornbeck's reform agenda that calls for the schools themselves to become the locus of change, the fruits of these modest expenditures will become even more apparent.

Selection Criteria

The grants highlighted in this booklet were chosen with several criteria in mind. These criteria include: projects whose themes focused on especially innovative strategies in curriculum, assessment, pedagogy, and cutting-edge technology; projects that succeeded in becoming widely disseminated and that led to partnerships with outside groups; grants resulting in exemplary demonstrations of student work; projects for students with special needs of some sort; grants linked to national curriculum standards or to other PATHS/PRISM initiatives; and grants that demonstrated unexpected positive outcomes. Because the research for this study was conducted in the summer of 1994, descriptions of exemplary grants from the 1994-95 school year were not included in this report.

**A
Multi-Cultural
View to
Humanities
through
the Arts**

Rose Braxton, Judith Friedkin
W.B. Saul High School
Grades 9-12/1989-90
Arts
\$3,435

How can teachers deepen the intellectual and creative interests of college-bound students at a vocational agricultural and science school? The answer at Saul High School was a multi-cultural humanities and arts project which focused on dance, art, drama and literature in an investigation of diverse cultures in the Philadelphia community. Project activities uncovered multi-cultural influences to prepare students for arts and humanities courses in their future university studies.

Activities included writing poetry, short stories, monologues, plays and letters as well as the study of literary works. Students examined books displaying collections of paintings, photographs, sculptures, and other art forms and used two collections of poetry.

School assembly programs allowed students to experience the performing arts. The Walnut Street Theater Company performed *American Anthology* and *Shakespeare Alive* at Saul High School. Additional artists provided Flamenco and African American dance ensembles, and introduced students and staff to piano musical styles of the 20th century. Trips to area museums and cultural institutions included visits to the Afro-American History and Culture Museum, Pennsylvania Academy of Fine Arts, Philadelphia Museum of Art, and a dress rehearsal of the Philadelphia Orchestra. As a culmination to their arts-centered experiences concerning the diverse cultures of Philadelphia, the students created and performed skits, poems, dance interpretations, and other artistic work for classes throughout the school and the Home School Association.

Impact

Literature, video, and music collections became a permanent part of the school library's resources. Teachers incorporated the project's activities into the curriculum, using them as a basis for developing "Writing Across the Curriculum" programs. The strong art focus of this project introduced students to cultural resources within Philadelphia and established the school's connection with various artists and institutions. More importantly, students and staff developed a broader understanding of "education" and the power of connecting all learning experiences — in the arts, humanities and sciences — as the basis for life-long learning.

Consultant

Walnut Street Theater

Kathleen Clark
Charles Drew Elementary School
Grade 2/ 1992-93
Arts
\$701

Dancing My Way Through Second Grade began as an opportunity to provide second grade students with classical dance experiences and helped them develop greater body awareness and refine gross body movement. Ultimately, this program enabled teachers, students, and parents the opportunity to discover a the significant connection between movement and dance and all teaching and learning.

First, class field trips to performances of *The Nutcracker* and *Peter and the Wolf* ballets introduced children to professional ballet performances in the Philadelphia area. Following these experiences, project activities included the training of classroom teachers and students in the fundamentals of classical ballet. Four dance lessons were provided each week for 10 months. Each 30 minute dance session provided instruction to students and teachers in ballet techniques including plies, battements and the five positions. The use of classical music during dance sessions familiarized students with such composers as Bach, Beethoven, Chopin and Tchaikovsky. Grant funds purchased a collection of ballet videos, books and cassettes of classical music. This collection was made available to the students and teachers at the Drew School. The culminating project activity was a dance recital performed by the second graders for students and parents in grades K through 4.

Impact

Students and teachers had classical dance training experiences within the Drew School. The second grade class observed professional performances and were able to compare and connect the skill and artistry observed to their own ballet training and development as an "artist". Teachers and students gained access to the new resources of dance and classical music collections within their own school library. Finally, the Drew students and teachers watched their own students in a recital reflecting the value of the project activities.

**Dancing My
Way Through
Second Grade**

Philadelphia Through Architecture

Daniel Coyle
William B. Hanna (Bluford) Elementary School
Grade 4 /1987-88
Arts
\$300

The Philadelphia Through Architecture program offers a rich example of the power and impact of thematic teaching which involves a consistent group of students and takes place over an extended period of time. The project began as an extension of a program that was initiated during the previous year in which thirty-four third graders participated in the Architecture in Schools Program, sponsored by the Foundation for Architecture. After completion of the program, the students continued to meet once a week with the art teacher, Project Director Daniel Coyle. During the 1987-88 school year, Mr. Coyle was able to work with these same students (now fourth graders) and designed a program which used the students' interest in architecture as a way to introduce and spark interest in a year-long study of the historical development of a city, city planning, and urban renewal.

The architects and consultants from the Foundation suggested that the students would learn more about city planning by actually building a model city. First, they began to gather information by viewing professional slides which compared local neighborhoods compared with Center City. Then they examined maps from different time periods, considering what factors may have been used in deciding where to locate buildings. After initial discussions about their overall community plan, the students learned the concept of scale, creating extensive drawings of buildings (residential and public), floor plans, maps of their neighborhood, and diagrams of the completed city. Each student also constructed a residential and public building for the model city. One special event was a field trip to the offices of the Vitetta Group, an architectural firm, to experience first hand the tools and skills of an architect.

Impact

The students became very familiar with maps, floor plans, and architectural terms, and were able to describe many of the activities in detail. Students also shared their work and knowledge with the whole school as the students' model city was set up in the library; the entire school was invited to view it and talk with the developers. Students collaborated with and received feedback from the architects as they were impressed with the drawing ability and confidence of the students. Perhaps most important, the students developed a strong interest in architecture and continued its study in the following year.

Consultants

Foundation for Architecture

Dorothy Kapenstein
John Wanamaker Middle School
Grade 7/1990-91
Arts
\$300

On Wings of Song

On Wings of Song, originally funded in 1988-89, introduced students to the history and art of opera by describing the struggles and achievements of African American opera singers in relation to the Civil Rights movement.

Discussions of the origins of opera as an art form involved students in exploring its foundation in 16th century Italy and tracing its dissemination throughout the world. Operas that were made into movies provided a resource for integrating historical information with the viewing of performances. Students listened to recordings and examined all facets of roles, acts, and scenes involved in opera productions. Students researched composers and orally presented their findings to classmates. Behind the scenes activities were examined through the use of *Behind the Golden Curtain: Hansel and Gretel at the Met* which describes the process involved in an opera production. Next came a focus on the experiences of professional black artists within the opera. Biographical resources allowed students to investigate the experiences of such artists as Roland Hayes, Marian Anderson, and Leontyne Price.

In a performance/workshop by Young Audiences of Eastern Pennsylvania, students observed and participated in a live opera production. Four singers and a pianist performed selections and scenes from a number of operas studied within classroom activities. Books, videos, and newspaper clippings enriched the performance and research activities.

Impact

Documentation of activities and materials developed through this project provided teachers with an extensive resource guide on opera and black performers. Through a variety of experiences, students were introduced to opera performances and historical accounts of this art form's legacy. Perhaps most notably, students experienced — as an audience and as performers — the vitality of live opera performance and were able to connect these experiences to the development of their own artistry and understanding of their culture's impact on significant passages in arts and social history.

Consultants

Academy of Vocal Arts, Opera Outreach program; Pennsylvania Opera Theater; Opera Company of Philadelphia; Young Audiences of Eastern Pennsylvania, Opera Workshop; Curtis Institute of Music; Opera North; Temple University, Esther Boyer College of Music; the University of Pennsylvania, Van Pelt Library, Special Collections Department

The Integration of Opera into a Visual and Communicative Arts Program

Joann Neufeld
Benjamin Rush Middle School
Grades 6-8/ 1992-93
Arts
\$500

In an effort to connect rich arts experiences with the development of students' writing and creative abilities, Ms. Joann Neufeld designed this arts program which allowed students first to examine and observe opera, and then create performances based upon it.

Students began the project by seeing films and performances of operas in order to assist students in the process of writing and performing a marionette performance of the opera, *Rigoletto*. In related studies, classes of students in grades six to eight visited the Philadelphia Museum of Art to explore Italian artists and art. Various consultants provided students with introductions to the creative and performing arts.

Project activities also included student research and critical examination of opera storylines and art history. Based on this work, students constructed the marionettes, set designs, costumes and props for an opera marionette performance. One consultant examined the career of a professional set designer. Another presentation demonstrated acting and singing techniques used in opera performances such as *La Donna Mobile*. Students created sketches and journals of project activities, lectures, and trips relating to the study of opera and Italian art. A video was created documenting the culminating student performance of *Rigoletto* using materials created during project activities.

Impact

In the culminating project activity, students participated in the full creative process of producing an opera. Such activities as the construction of marionettes and actual opera performances permitted students to uncover previously untapped talents. Through their experiences with and research of the various arts used in opera, the students identified relationships between the different arts and their own creative and intellectual talents.

Consultant

Pennsylvania Opera Theater

Myths, Marionettes, and Media

Susan Petry
John Welsh Elementary School
Grades 3 & 4/1993-94
Arts
\$2,500

A measure of excitement was added to after-school programs at the Welsh Elementary School through *Myths, Marionettes, and Media*: A project that provided students with extended learning in language arts and social studies through reading and discussing myths of different cultures. Students also explored the art of puppetry creating marionettes to enact myths, both in live performances and video productions. Project activities focused on identifying common themes and elements across various cultural myths. Overall, activities were designed to improve cultural understanding and artistic performance through a focus on myths and puppetry. After reading selections of myths, students chose one to enact with puppets corresponding to the characters in the myth. Students developed the script, constructed the sets, designed the costumes, and selected musical accompaniment for the performance. Project consultants and facilitators assisted by directing the performance. Students involved in the after-school project visited the Philadelphia Marionette Theatre and Museum. During this visit, they not only saw a performance, but also met and interacted with the professional directors and performers. Descriptions of staging considerations, performance requisites, and puppet construction provided students with background knowledge to use in planning their own performances in school-wide assembly programs.

The culminating activity was a collaborative student puppetry performance. A video collection of each puppetry performance was added to the school's library.

Impact

As a result of the project's puppetry performances, the Welsh Puppet Workshop (WPW) was invited to perform at other area schools as a traveling troupe. The WPW productions and visiting artists' performances were videotaped and became a permanent part of the school library. This collection gives students and teachers access to puppetry performances in discussions and activities involving myths.

Collaborators

Louis Frankwich, Ann Marie Burns, Barbara Reddell

Consultants

Temple University School of Communications, The Philadelphia Marionette Theater

A Trip Through Time With Art and Architecture

Susan Rodriguez
Overbrook Educational Center
Grades 1-4, Visually Impaired /1985-86
Arts
\$2,314

A Trip Through Time With Art and Architecture introduced children to the architectural traditions that have shaped their world. A blended class of visually impaired and non-handicapped students became familiar with styles, periods, and techniques of architecture through the ages and in their contemporary surroundings.

This year-long project covered eight historical periods. The project began with the Stone Age, which required that students work in a cardboard "cave" called the "World's First Art Gallery." The students moved on to a study of the history and influence of Egypt with research on pyramids, tombs, hieroglyphics and pictorial communication. Following this, the students studied Greek and Roman Styles of temples, sculptures, arenas, and forums, and observed how these themes are used in modern times. In December the students learned about the castles, cathedrals, and stained glass of the Middle Ages. The students observed present day stained glass as well as created their own works. The Renaissance unit focused on the paintings applied to architecture, altarpieces, panels, and ceilings at that time. Students replicated this process by painting on a canvas glued beneath a table. The students then "sailed to America" and were immersed in housing, furniture and crafts of the colonial time period. A study of modern architecture followed. The final unit centered on NASA space colonies and homes of the future.

Project activities also included a trip to the University Museum, viewing slides prepared by professional architects and weekly visits from architectural consultants. The culmination of the project was a three day gallery exhibition of the students' works at the Foundation for Architecture.

Impact

The project was expanded to all classes under the art appreciation/humanities program at Overbrook Educational Center. A teacher's guide, developed by the Project Director, was made available through the School District. Students learned about the historical, technical and business sides of architecture through their weekly meetings with professionals. Many students expressed an interest in becoming architects. School District teachers, administrators, parents, and other community members attended the gallery exhibition.

Consultants

Rolaine Copeland, Foundation for Architecture; Oscar Harris, Michael Selditch, Alan Levy, Lee G. Copeland and Terry Vaughan, University of Pennsylvania

Bringing the Arts to Logan

Beth A. Roth
James Logan Elementary School
Grades K-6/1990-91
Arts
\$2,650

Bringing the Arts to Logan was a project created to provide students with an increased awareness of the arts through direct participation and observation. Teacher Beth Roth and project collaborators used the grant to fund performances and workshops by puppeteers, storytellers, a mime, an opera group and several drama groups.

The Logan students were exposed — on a school-wide basis — to multiple forms of creative expression including dance, music, and drama. In their classroom activities, the children experimented with these distinct art forms and produced creative works of art, music, literature, and drama. Students made puppets and sets for dramatic performances enacted stories through mime, and wrote original versions of folklore and fairy tales.

The culminating activity of this project was a student parade showcasing the drama, mime, choral speaking, puppetry, and musical pieces which had been created in the collective classroom activities.

Impact

The teachers involved in the project utilized this program as a significant starting point to introduce students and staff to a variety of arts agencies and artists within the Philadelphia area. Teachers reported that they have incorporated and continue to utilize many of the techniques demonstrated by the consultants, such as using dramatic performances as a form of assessment, and fostering student creativity and self-expression in making stories, picture books, and poems in all areas of their classroom teaching.

Collaborators

Kenneth Hilliard, Clarence Bullock, Maggie Wollman

Consultants

Young Audiences of Eastern Pennsylvania (mime, folk music, puppeteer, opera quintet, and "Stone Soup" quintet program), Joan Wolf (storyteller), Spring Nursery School of the Arts (interpretative dance, vignettes, and monologues on black history and spiritual and gospel musical performances)

Art Across the Curriculum

Debra F. Rubin
John Moffet Elementary School
Grade 1/1992-93
Arts
\$500

Art Across the Curriculum was a project that introduced and familiarized children with the histories and creative styles of particular artists by integrating artistic works into instructional activities across the disciplines. Specifically, a transitional first grade class examined works by seven artists including Michaelangelo, Da Vinci, Van Gogh, Monet, and Cassatt.

At the beginning of the program, prior to a visit to the Philadelphia Museum of Art, students studied books and prints of the artists' work which had been purchased with grant funds. The students were delighted to directly observe the now familiar works of art when they toured the museum. In other project activities the children learned about the lives of the artists by creating biographies and drawing portraits based on the artists' particular style. During a related math/science project focused on pattern and number concepts in the colors and seasonal transitions displayed in prints of the artists' work, the children produced art using a variety of materials such as paint, food coloring, and play dough. During the project, the students produced a multitude of artistic creations which were displayed in the school's corridors and classrooms.

Impact

The students were able to identify famous works they had examined according to their style, content, and color. The Project Director also recognized significant changes in the children's ability to identify artistic styles within art, patterns within mathematics, and colors. Finally, this introduction of art across the curriculum activities developed the children's own artistic talents, providing them with an additional avenue of expression and creativity.

Artists at Work

Rosa Serota
Avery D. Harrington Elementary School
Grades 1-4/1991-92
Arts
\$800

Some of the most innovative arts education programs of the involve the community by joining local artists with projects at neighborhood schools. The *Artists at Work* project was designed to do just that, focusing on first through fourth graders at Harrington Elementary School working in a connected series of workshops with ten Philadelphia-based artists. Each artist conducted an introductory session to describe his or her self and artistic work to the children. Demonstrations focused on the creative process and solving problems during the production of art forms. Children participated in hands-on experiences with the artists following their classroom presentations.

After demonstrations, the children created works of art under the artist's direction. Art forms explored in the student workshops included print making, weaving, book making, painting with water colors and pastels, sewing, doll making, stained glass creations, and jewelry making. Classroom follow-up activities included documenting the problem-solving strategies presented in each workshop through students' journal writing. Writing activities resulted in the production of "how to" sequential books and fictional stories in handmade books. Additional research was conducted by students on various art forms explored through project activities. The culminating event was a gala exhibition of student art.

Impact

Participation in workshops allowed students and their teachers to become involved in creating art forms through a variety of artistic media. The project brought community artists into the school, allowing them to participate in collaborative projects with school children. Integrating subject area activities with art encouraged teachers to collaborate across disciplines. Additionally, these hands-on activities provided students with an alternative form of expression and demonstration of learning experiences.

Collaborators

Carol Hirschfeld, Renee Stroback, Margaret Butler

Consultants

Lucarta Kohler (glass sculpture), Lisa Learner (oil & acrylic painting), Monika Turtle (textiles), Erika Schmit (handmade books), Laura Morris (weaving), Walter Edmonds (drawing & etching), Richard Wagner (silk screen graphics), City Zen Kane- Steven Ford and David Forlano (jewelry), Ellen Powell-Tiberino (pastels & mixed media), Will Stokes (fabric)

“PATHway to Art”

Lynne Yermanock Strieb
John B. Kelly Elementary School
Grades K-6 /1984-85
Arts
\$5,000

How can art be made more accessible to children, their teachers and the community? Through *PATHway to Art*, students at Kelly Elementary School took part in a variety of visual art experiences and became knowledgeable of the styles, content, and media of many masterpieces.

Eighty framed reproductions of well-known paintings, prints, masks, and cloth art were hung in a permanent display in the PATHway Gallery located in the halls of Kelly Elementary School. Each classroom chose three art pieces to study. A lending library of slides, filmstrips, art reference books, and laminated reproductions was developed for classroom circulation. Each art work was indexed according to artist, title, subject, and possible content area uses. Further art exposure came when each class traveled to the Philadelphia Museum of Art on one or more occasions. The students drew and wrote about their trips and connected information about particular art museum pieces to the art displayed in their school. The entire staff attended meetings led by artists, art historians, museum educators, and Kelly's art teacher. Later, each teacher contributed a lesson idea to be compiled in a PATHway to Art activity book. Finally, students made their own contributions to the PATHway Gallery. Their works, which echoed the various styles of the masterpieces, were hung up on cork stripping posted through the halls.

Impact

Over six hundred children, parents, teachers, administrators, and community leaders attended the gala PATHway Gallery opening in April. The PATHway to Art activity book, featuring over twenty lessons, was published and made available to Kelly teachers and others. A catalog of the Gallery's art works was given to parents. The Project Director was invited to present her results at a meeting of the Florida Institute on Visual Education. Several students' art work was displayed at the Committee to Support Philadelphia Public School's "A Celebration of Excellence".

Collaborators

Catherine Cox, Adelaide Dockery, Avise Ewell

Consultants

Paula Suransky, Philadelphia Museum of Art

University City High School
Grades 9-12/1988-89
Arts
\$300

In Every Way the Arts

In Every Way the Arts expanded the humanities curriculum of University City High School by focusing on links between music, technology and communication. The project provided opportunities for ninth through twelfth graders to create and perform music, learn about various careers in the performing and expressive arts, and discover the importance of writing and communication skills in the arts and all disciplines.

One of the highlights of this project was a lecture by actor/director/author, Ossie Davis. Mr. Davis presented a workshop narration and performance for several Music and English classes, staff and visitors. Students later wrote enthusiastically about their reactions to this open exchange. A second activity was a field trip to the Women in Cablevision National Conference held at Temple University. The students discovered the variety of career options available in media, and their comments were featured in an issue of Women in Cablevision Journal.

Students also participated in workshops conducted by professional musicians such as string percussionist Steve Kleiman presented an assembly and taught students about instruments such as the ukulele, banjo, and acoustical and electric guitar. A school-wide activity involved professional jazz musician-educator Byard Lancaster who taught a full day of classes, focusing on the theme of music as a universal language. He was also the featured guest at University City High School's "Tribute to Dr. Martin Luther King, Jr." Following Mr. Lancaster's instruction, students created 12-Bar Standard Blues music compositions.

Impact

The entire school benefited from the presentations by the various artists. By listening to different types of music and instruments, students discovered the music-language connection. Interestingly, this process produced a new method of conflict resolution when the writing exercises done in both music and English classes increased student skills and comfort level about writing personal comments as a way of resolving disputes among themselves and with their teachers. Dr. Tyler was invited to make a presentation of the "Creating a 12-Bar Blues" project by the District One Language Arts Supervisor.

Consultants

Ossie Davis, Byard Lancaster, Steve Kleiman, Women in Cablevision

**Reading/
Writing/
Research II:
Technology in
the Service of
Creativity**

Evelyn Bender
John B. Stetson Middle School
Grades 7-8 /1986-87
Computer Technology
\$950

The *Reading/Writing/Research II: Technology in the Service of Creativity* project focused on the improvement of students' reading, writing, and research skills through the use of computer technology. This grant, a continuation of a 1985-86 PATHS grant project, facilitated the development of students' writing skills through the use of innovative software. Computers were made available to the students before and after school, and during library periods. Although scheduling problems at Stetson limited library time for many students, there was always a crowd waiting for the Project Director to open the library each morning.

Eighth graders who had gone through the previous year's program worked on more advanced activities. They learned to use Poetry Express and Dazzle Draw to create and illustrate poems. Research skills were reviewed using the program "How Can I Find It If I Don't Know What I'm Looking For?" Eighth graders used the "Magic Slate," "Story Tree," "Outlining Skills," "Sensible Speller" and "Sensible Grammar" software when writing social studies or English reports. "Adventure Construction Set" allowed students to write adventure stories, and "Newsroom" enabled students to produce newsletters.

Impact

The computer software collection of Stetson Middle School was substantially updated and expanded. Dr. Bender spoke about the project at a workshop sponsored by the American Library Association and the National Endowment for the Humanities, and also presented information about the project at the National Educational Computing Conference. The project was continued through the support of another PATHS grant and a \$10,000 research grant — focused on the use, impact, and feasibility of a computer assisted writing facility — from the American Library Association.

Collaborator
Melvin Elliot

Marian Darmstader
John Story Jenks Elementary School
Grades 6-8/1987-88
Computer Technology
\$2,327

A Data Bank: The Historical Perspective of Math and Science was developed to teach students how to apply their knowledge of creating a data bank to create an all-inclusive math and science resource of "real world" data for middle school students. The project received an additional \$500 grant from the Computer Applications in Teaching Program to cover the cost of telecommunications. A previous PRISM grant had provided Jenks with data bank software.

The students conducted research on mathematicians and scientists using a data base format. Vocabulary lists and definitions were then compiled by the students based on their research. A timeline, with important dates in math and science was then formulated using "Timeline" software. The students observed sample data bases and kept a journal of their findings. Finally, the students entered, modified, and edited their research into the data base.

Impact

Students were extremely pleased with the results of their work. Although unplanned, all of the project group members were female. The project proved to be a way of generating interest in computer technology to a population that frequently failed to sign up for elective computer classes. The girls enjoyed using personal information in their data bases and realized the capacity of the computer. Materials from the data base were printed out and distributed among local schools. The University of Pennsylvania and Carnegie Mellon University Science Network requested copies of the materials. The project director and collaborators had a lesson plan from the project selected as one of the top 100 lesson plans published in Computer Learning Month's "Lesson Plans - Grades 6-8".

Collaborators
Margaret Lloyd, Marilyn Young

**A Data Bank:
The Historical
Perspective of
Math and
Science**

**Linking Charles
W. Henry
School &
George
Washington
Carver High
School for
Students'
Success Now &
in the Future**

Mary Green
Charles W. Henry School
Grades 6-12/1992-93
Computer Technology
\$2,500

This project was developed from a previous C.W. Henry school and G.W. Carver High School collaborative effort during which classes of middle school students visited the high school facilities. The goal was to prepare and assist students to make the transition from middle to high school. Students and teachers who participated in this collaborative project formed partnerships to do research projects in science and mathematics.

Throughout the wide range of connected project activities, participants integrated the use of scientific calculators and computers in statistical analysis, data interpretation, and graphing activities. Computer activities included constructing spreadsheets and using word processing programs to generate scientific reports. Henry students in grades 6-8 joined Carver students for weekly, double-period classes at the Carver to collaborate on science fair projects. High school students acted as mentors for the middle school students in developing and implementing science fair projects. Students participated in the George Washington Carver, Delaware Valley, and Philadelphia (Junior Academy of Science) science fairs, at local and state levels.

The project also funded joint staff development workshops. Collaboration during these sessions allowed teachers to design interrelated activities which prepare middle school students for science and mathematics curriculum at the high school level.

Impact

Students designed cooperative science fair projects which were presented at various science fairs. The Carver High School student mentoring provided Henry students with provided high school "connections" prior to the high school transition. High school students increased their own skills by teaching the application of scientific and mathematical concepts to middle school students. Collaboration between staff members at both schools improved the integration of middle and high school learning experiences, and permitted teachers to consider specific needs as well as connections between both levels of schooling.

Collaborators

Mary Lou Goldberg, Marlene Hilkowitz, James McSherry, Harrison C. Kornbau, Phyllis Stickney, Susan Miller, Eileen Adams, Fred Dobson, Janet Fletcher, Barbara Kluxen, Janice Thomas, Patricia A. Walsh, Alice Wootson

Nina Nemeroff
William Rowen Elementary School
Grades 3-5 /1985-86
Computer Technology
\$1,350

Using Literature and Computers to Motivate and Improve Writing introduced students to classic and new children's literature and used computers to encourage and improve student writing. Grant funds were used to purchase computer software programs and blank diskettes.

Classroom teachers collaborated with Ms. Nemeroff, the computer science teacher, in the selection of literature that would be used during the project. The computer software "Missing Links" and "Newbery Winners" were selected to provide students with presentations of children's classics. Students viewed these programs weekly for three and a half months. In addition, they read books in the classroom and received lessons on the writing process which prepared the students for their word processing. They wrote rough drafts in the classroom and used "Kidwriter" in the computer laboratory to revise their work.

Using the computer facilitated greater student/teacher and peer collaboration. Because of the ease of editing, students were enthusiastic in revising and polishing their writing. The culminating activity of the project was the printing and distribution of a booklet of students' writing.

Impact

Despite the fact that a computer printer was not available until almost the end of the year, a greater interest in writing was developed among students involved in the project. The students also became prolific writers: An aspect of the program which was demonstrated by students' constant use of the word processing program to write unassigned personal stories and accounts. They were also enthusiastic about reading the classics on the computer. The students' booklets were displayed in Rowen's halls and distributed to teachers. A description of the project was shared with the entire school with an invitation to be included in the following year. Parent volunteers were also utilized to aid in the project's overall implementation.

Collaborators

Barbara Goldstein, Jill Silverstein, Beth Becker

**Using
Literature and
Computers to
Motivate and
Improve
Writing**

Development of Spatial Sense Through Lego TC Logo

Patricia A. Walsh
Charles W. Henry School
Grades 4,6 & 8/1990-91
Computer Technology
\$300

Students in grades four and eight used Lego TC Logo to build and operate assorted machines which were controlled by the Logo computer programming language. Through peer collaboration involving construction and programming activities, students were able to develop problem solving strategies.

During one phase of the project, eighth grade students served as mentors for younger fourth graders, passing on their skills and knowledge concerning the Lego TC Logo program. After this collaboration, the fourth graders were able to develop independent projects. Teams of students selected an item to construct and then completed the computer programming for its operation. Sixth grade students displayed their Lego creations at the Philadelphia Desegregation Fair.

Impact

As a result of their project display at the School District of Philadelphia Desegregation Fair, Henry School Students formed a partnership with the George Washington Carver High School of Engineering and Science. The younger students attended the science fair at Carver High School, and five Carver students spent a week at Henry School mentoring the fifth, sixth, and seventh grade students in an introduction to the "Appleworks" program, "Voyage of the Mimi," and other mathematics software. This project eventually led to extended affiliation between the two schools during the 1991-92 school year. (See page 15.)

Maria E. Mills-Torres
Thomas Edison High School
9-12/1986-87
Foreign Language
\$3,000

In an effort to link students' ethnic cultures to classroom studies, Maria Mills-Torres designed the *Multiple Paths: Language, Literature, Art and Architecture* program to familiarize students with Spanish artists, architects, and literary periods. Students from the Edison Spanish foreign language and Spanish-as-a-first-language (Español) classes were involved in the project.

Students and faculty from all classes attended five lectures given by contemporary artists. Johnny Irizarry of Taller Puertorriqueño spoke about Latin American and Puerto Rican artists. Following a presentation by Alberto Becerra on art and musicology, students created their own sketches. Amalfi Ramirez talked about "Achieving Your Dreams" and showed students how to compose profile drawings. Reinhard Valle lectured on Spanish architecture and architects. Classes also viewed video and slide presentations of numerous works of art and artists.

Activities for the Spanish foreign language classes included designing a dream house, creating and reporting on murals, and learning about various art movements. In the Español classes, students critiqued and created paintings, observed community architectural styles on a neighborhood walk, and visited the Cooper-Hewitt Museum and the Museo El Barrio in New York.

Impact

A video presentation of Menotti's "Goya" generated a new-founded interest in opera. Two students' writings about Spanish art received first prize awards from a local writing contest. Students traveled to the Philadelphia Museum of Art on their own time to observe Spanish works of art. The project directors presented the project at the School District's "Good Ideas" workshop. They also submitted articles for "Linguae Mundi" the foreign language newsletter. The consultants were invited back for future visits.

Collaborators

Zen Krekevich, Margarita Battistini

Consultants

Johnny Irizarry, Alberto Becerra, Amalfi Ramirez, Reinhard Valle, all of Taller Puertorriqueño

Multiple Paths: Language, Literature, Art and Architecture

One School - Many Worlds (The Study of Our Cultural Heritage Through the Humanities)

Josephine Giampietro-Miller, Francine Levine
George Sharswood Elementary School
Grades K-8/1986-87
Interdisciplinary
\$2,500

This whole school project celebrated the diversity of the students' cultural heritage. The goal was to enhance the students' understanding and appreciation of their own and others' cultures through the study of art, music, and literature.

Differences in holiday traditions provided a focus for a number of project activities including a special winter assembly program performed by the students. James Turk of the Balch Institute demonstrated how artifacts reveal aspects of a culture. William Ward of the Philadelphia Maritime Museum discussed the sea travel conditions that many immigrants have endured. Charlotte Paul spoke about Jewish traditions and displayed religious artifacts.

In March, Sharswood staff and the Home and School Association organized a luncheon featuring foods from around the world. In addition, a world-wide selection of crafts was taught to Sharswood students, including Hmong paper cutting, origami, Pysanky egg decorating, and making Native American jewelry. Individual family traditions were presented by visiting parents and Diana Sidener of the Folk Life Center. The local tradition of the Mummies was demonstrated by Sharswood students and parents who belong to Mummies groups.

The culminating activity of the project was an assembly that combined art, music, dance and literature.

Impact

Students developed a better understanding of their own and others' heritage and cultural traditions. The school worked cooperatively for the entire year to learn about different cultures, forming a committee to continue the project the following year. The Home and School Association agreed to donate \$2,000 and develop a new partnership with Strawbridge and Clothier in order to further these efforts.

Collaborators

Marjorie Robbins Zeggane, Patricia Tilden

Consultants

William Ward, Philadelphia Maritime Museum; James Turk, Balch Institute for Ethnic Studies; Charlotte Paul, National Museum of American Jewish History; Diana Sidener, Folk Life Center; University Museum of Archeology and Anthropology; American Swedish Museum; Philadelphia Museum of Art; Mummer's Museum; Afro-American Historical and Cultural Museum; Ukrainian Society; Arthur Hall Dancers; Young Audiences of Eastern Pennsylvania

Simon Gratz High School
Grades 10-12/ 1990-91
Interdisciplinary
\$500

English and Science Ecology Collaboration

The *English and Science Ecology Collaboration* was a joint effort between a Science & Technology and English class. The project was designed to heighten student awareness and communication skills concerning environmental issues.

Activities included keeping dialogue journals, sponsoring debates, and collecting newspaper articles which addressed environmental issues. Students within the English class produced ecology portfolios consisting of creative writing samples on ecological topics. One act plays as well as various forms of creative writing resulted from project activities.

Science and Technology students collected ecological data and composed reports based on the outcomes of laboratory activities. Teams of students conducted research projects on environmental issues such as acid rain, recycling, and environmental pollution. Their findings and project results were compiled in group reports and published.

Trips to the Philadelphia Waterworks, Schuylkill Valley Nature Center, Academy of Natural Sciences, and the Limerick Atomic Information Center supplemented the school work and provided hands-on activities. These trips helped the students identify various area agencies that collect and disseminate environmental information. As an additional support for student research, a collection of related videos and literature was purchased for the library.

At the conclusion of the program, students from both classes painted a large mural depicting environmental issues investigated during the project's activities.

Impact

Project activities established a partnership between the Science and Technology and English teachers and classes. Students gained access to various local institutions and resource staff who were engaged in the investigation of ecological conditions and the implementation of preservation activities. Students learned about additional fields of science such as paleontology, anthropology, and archeology. Also, the student publication demonstrated the value of integrating language arts and science activities through the study of ecology.

Consultants

Philadelphia Waterworks; Schuylkill Valley Nature Center; Academy of Natural Sciences; Limerick Atomic Information Center; Cynthia Jefferson, Mayor's Commission on Literacy; Michael Weilbacher ("Earth Talk" radio program host)

Fairhill's Centennial: A Study of the School and Community at the Turn of the Century

Marlene Mendez
Fairhill Elementary School
Grades K-6 /1987-88
Interdisciplinary
\$3000

Inspired by the discovery of Fairhill Elementary's original cornerstone, dated 1887, *Fairhill's Centennial: A Study of the School and Community at the Turn of the Century* involved all students of Fairhill Elementary School in a connected study of the school's one hundred year history.

To begin the program, John Alviti trained the staff in the use of primary sources in the curriculum. Additional staff development was conducted on antique toys.

Students were involved in a number of special events conducted throughout the year including a centennial T-shirt design contest and a special Halloween category for the best Victorian costume. Costumes were also discussed by the owner of a local vintage clothing store. For a Centennial program, each student created a birthday card for the school. A time capsule was begun, and alumni memorabilia was displayed as part of the program. Present and former students and staff, administrators, and community members attended the ceremony. Superintendent Constance E. Clayton (a Fairhill alumna) presented a City Proclamation to the school. The students continued to study the time period by sewing and designing a Centennial quilt and by constructing a wooden model of the 1888 Fairhill neighborhood. Old maps and archival photos aided students in their research. Throughout the project, students kept a centennial journal. Students' creative writing on "A Fairhill Tale" were highlighted and published.

Impact

The entire school united in a collaborative effort to research Fairhill's history. Alumni were interviewed and provided a rich oral history. The students developed strong relationships with Fairhill senior citizens. Students' writing and research skills improved as they observed and recorded things in the neighborhood that they never noticed before. Materials gathered for the project were published in a resource book entitled *Discovering Fairhill's Past*. A permanent archive was created to enrich future projects.

Collaborators

Ann Maria Mattei, Theresa N. Taylor, Barbara Howard; all other Fairhill staff members were involved in the project

Consultants

John Alviti, Atwater Kent Museum; John L. Loeper and Walter Licht, University of Pennsylvania; Aubrey Baldwin, Jim Wiley and Donna Horowitz, Please Touch Museum; Fred Locke; Ruth Anne Bowen

Helen P. (Peggy) Perlmutter
John B. Kelly Elementary
Kindergarten/1986-8
Interdisciplinary
\$300

That Reminds Me... was a project designed to help Kindergarten children make intellectual connections by bringing the real world into the classroom. Funds from the grant were used to purchase a variety of materials, animals, and food that stimulated the students' thinking about their world.

Live animals like silkworms, butterflies, snakes and ducks became members of the kindergarten class. The children were able to observe them in all stages of life. Silkworms had to be magnified in order to be seen when they first arrived. Monarch butterflies led to a map lesson as students wondered where they migrated. Ducklings, chicks, and goslings were hatched and matured throughout the year. Charts were made comparing their wings, feet, and beaks. Both the students and the ducks were able to sit quietly on a rug and listen to the story of Ping. Snakes and mice were also raised in the classroom. The children had a rather philosophical discussion on the food chain, wondering why the snakes couldn't just eat peanut butter or cat food. The students also had the chance to compare the growth of a human baby with a baby mouse thanks to monthly visits by a local mother and child.

The students also took part in many food-related activities. Each month a birthday cake was baked from scratch to celebrate birthdays. Many children had never made a whole cake at home, and were amazed to learn the ingredients. The students also made peanut butter and apple sauce by hand. A culminating activity was a marshmallow roast in a local park. The students had to understand the concept of length in order to find sticks and they also learned about fire safety. Toasting marshmallows was a new and wonderful experience for the children.

Impact

The students were able to relate their experiences in and out of the classroom throughout the year. They were able to make connections, and say "That reminds me..." constantly. Books purchased on cooking and animals widened the class library collection. Animals that could be frightening such as mice or snakes were treated like friends. The animals and resources were included in future projects.

That Reminds Me...

Creating the City Beautiful: Re-experiencing Philadelphia through the Benjamin Franklin Parkway

Sue Rosenthal
High School for the Creative and Performing Arts
Grades 9-12/1989-90,
Interdisciplinary,
\$2,000

Creating the City Beautiful involved students in an artistic and historical study of the Benjamin Franklin Parkway and surrounding museums. By studying architectural styles of structures along the Parkway, students began to understand the historic foundation of this part of the city.

Following a series of site visits, extensive exploration and research, students constructed a model of the Parkway, which aided in visualizing surrounding buildings and parks. Consultants from the Foundation for Architecture assisted student groups in construction of the model and their ongoing investigation of the various architectural styles of buildings, sculptures and fountains along the Parkway.

The students then moved beyond the original historical focus of the project to develop plans for renovating the Parkway. Project consultants, including architects affiliated with the Architecture in Education Program, provided the students with the design plans for the Parkway. Using this resource, the students developed a plan for a central island which would run from City Hall Plaza to the Art Museum. Recommendations included construction of an outdoor stage and adding colored brick walkways to direct pedestrian traffic.

Impact

Students gained a rich historical perspective of Philadelphia through their study and research of the Benjamin Franklin Parkway. Perhaps more significantly, through project activities, students utilized their historic knowledge and developed a plan for the renovation and reconstruction of a "pedestrian friendly" walkway. These plans were then presented to experts, including the Operations and Landscape Management Director of the City's Planning Commission, The City Parks Association, The Friends of Philadelphia Parks, and The Fairmount Park Commission.

Collaborators

Sonya Wassmansdorf, Helen Berkowitz, Carolyn Pritchett, Richard Cohen, Jacqueline Kunin

Consultants

Edmund N. Bacon, Philadelphia Planning Commission; David Brownlee, University of Pennsylvania College of Fine Arts; Cynthia Little, Pennsylvania Historical Society; Mary Flournoy, Free Library of Philadelphia; Rolaine Copeland, Foundation for Architecture; James Gallagher, Franklin Institute; Paula Suransky and Jean Woodley, Philadelphia Museum of Art; Morris Vogel, Temple University

Interdisciplinary Humanities Course

Sue Rosenthal
High School for Creative and Performing Arts
Grade 12/1984-85,
Interdisciplinary,
\$5,000

In an effort to connect diverse yet related learning experiences of all disciplines, the *Interdisciplinary Humanities Course* was designed and implemented for all seniors at the High School for Creative and Performing Arts. Initially, the course focused on the history of sculpture, painting, architecture, dance, theatre, literature, and music. Ultimately, the course provided CAPA students with the opportunity to understand the history and connection of all disciplines as well as the impact of this history upon their own artistic creations.

The project connected distinct periods in the arts including pre-historic time, Baroque, Rococo, Realism, and Impressionism with corresponding periods in history. For each time period, beliefs and values prevailing at the time along with particular events were studied. Students prepared lively oral reports about artists who lived and worked before 1900. In February, Handel's birthday was celebrated with a cake, performances of his music and reading of his biography. Numerous consultants contributed their expertise to the project through lectures, performances, and field trips. The final exam of the course included an option to create or perform some work in the student's major field.

Impact

The students demonstrated a better understanding of the relationship of the humanities across disciplines, as well as a greater knowledge of Philadelphia's cultural resources. The interdisciplinary humanities class became a permanent part of the High School for Creative and Performing Arts curriculum.

Collaborators

James Culbertson, Althea Leslie, Jare Sausaman, David King, Joseph Gorniak, Richard Cohen

Consultants

David Burnett and Barbara Klazynska, University of Pennsylvania; Richard Hamilton and Stephen Salkever, Haverford College; Edmund N. Bacon, Philadelphia Planning Commission; Sylvia Glickman, Louise Simmons, Dan Jalboot and Judith Stein, Pennsylvania Academy of Fine Arts; Paula Suransky, Philadelphia Museum of Art; Shirley Turpin-Parham, Afro-American Historical and Cultural Museum; Opera Ebony; Young Audiences of Eastern Pennsylvania; Pennsylvania Opera Theatre; Foundation for Architecture; "Y" Arts Council

Parent Involvement in Reading and Science

Carol E. Smythe
John Moffet Elementary School
Grades 1-5/1989-90
Interdisciplinary
\$3,000

Parent Involvement in Reading and Science was created as a direct response to parents' interest in assisting their in the progress of their children's education. Specifically, the program provided parents with materials and instruction in home learning activities which reinforce classroom learning experiences.

In collaboration with the Philadelphia Free Library and Franklin Institute, teachers began the program by developing home science kits with integrated reading selections for parents to borrow. Parents were invited to attend two workshop sessions during the Fall and Spring terms to examine and learn about activity kits and literary resources available to them. Suggestions and demonstrations of teaching techniques, such as reading aloud, open questioning, and methods of vocabulary development were demonstrated using materials in the lending library.

In collaboration with the "Museum to Go" staff from the Franklin Institute, the project leaders designed hands-on science activities for parents and students. Interactive activities developed by project collaborators included planting seeds, experimenting with electricity using batteries and flashlight bulbs, and using magnets and compasses. Basic science concepts covered in project activities were extended through related readings contained within the instructional kits.

Impact

Project activities enhanced the connection between home and school at Moffet. Workshops provided parents with specific activities and strategies to enhance their children's classroom experiences. Kits developed through this collaboration served as a permanent resource within the school. Consultants introduced parents, teachers, and students to a variety of resources available through the Free Library and the Franklin Institute. Additional activities and reading resources were planned for development in following years.

Collaborators

Howard Dolgin, Pamela Kaplan, Arlene Goldsmith, Caryle Hawkins, Donald Ross, Carol Cronk, Marguerite Pridgen, Valerie Flitter, Corrinne Bennett, Debra Rubin, Carol Friedman, Jacqueline Lee-Way, Nancy Nayowith, Mary Sue Lederer, Carmen Battista

Consultants

Franklin Institute, Free Library of Philadelphia

James A. Villareal
Eleanor C. Emlen Elementary School
Grade 5/1988-89
Interdisciplinary
\$1,430

Mythology in Renaissance and World Art

Mythology in Renaissance and World Art connected fifth grade art classes with multi-sensory Latin and mythology lessons. Beginning with a study of fifty selected mythological paintings by the masters, students became familiar with the great myths as art, as history, and as vehicles to communicate human wisdom.

First, with the help of Nigel Taylor of the University City Printing's C.A.P. Center, the Project Director was able to create reproductions of paintings for use at Emlen. Through the use of computer technology, project collaborators enlarged small pictures from textbooks, postcards and prints. The project collaborators used a method of reproduction which segmented the small pictures. The segments were then scanned with laser beams to pick up the distinct details of the art. The segments were then combined, mounted, and framed and used as a "gallery of myths" by lining the Emlen School's hallways with the finished products.

Art students studied these prints and had the opportunity to create similar works using assorted media. During the Latin classes they illustrated myths, related descriptive Latin words and discussed contemporary analogies to the various myths. The students were encouraged to write about their personal reactions to the art as well as their interpretations of the myths.

Impact

The prints became a permanent fixture in the school for all students to observe and learn from. The central location of the gallery generated a school-wide interest in art and mythology. Local newspapers highlighted the gallery's opening and it has become the first stop on Emlen School tours. Mr. Villareal reported on the results of this project at the Foreign Language in Elementary Schools (FLES) meeting later that year.

Collaborator

David Birnbaum

Consultants

Nigel Taylor, C.A.P. Center at University City Printing

The Poetry Connection: Making Language Work for You

David Appleby
Fox Chase School
Grade 6/1988-89
Language Arts
\$300

To begin this program, classroom teacher David Appleby encouraged his students to become "poetry detectives" and search for poetry in the world around them. Over the course of the program, his students did just that as developed an awareness, appreciation, and knowledge of various poetic forms. They found them first in advertising, music, television, and radio. Ultimately, they discovered the poetry of language, voice, and the oral traditions of many cultures.

The students participated in dramatic activities where they learned to use words to express feelings. After researching specific poets and reading and interpreting the poetry of others, the students created their own works. The sixth graders were audiotaped reciting their own poems and had the opportunity to reflect on the strength of oral traditions. Members of the school community were encouraged to share their interest in poetry: the principal read his favorite poem, and a local senior citizen visited the classroom to recite poetry and give poetry writing lessons.

Impact

The children's knowledge of poetry and language in general was greatly increased during this project. The classroom poetry collection was increased with poetry anthologies and collections of students' own work. Parents were highly enthusiastic, and several other fifth and sixth grade teachers expressed interest in including some of the activities in their classrooms. The students discovered they could be proficient in memorization and oral expression. A large volume of poetry in many forms was produced by the children. Some of these works were read at the School District's Academic Plus Awards ceremony. Others were shared with pen pals.

Roberta Besden
Edward Gideon Elementary School
Grade K-5/1992-93
Language Arts
\$300

Wee Deliver-US Postal Program

The *Wee Deliver-US Postal Program* created an inter-school mail delivery system that encouraged and improved the academic achievement and behavior of Gideon Elementary students. Through the simulation of a postal system, students, teachers, and administrators gained an additional means of communication and support through the mail medium.

Upon recommendation by their teachers, students were appointed to positions such as postmaster and postal delivery personnel. The children thus experienced a model work environment including an interview process and on-the-job evaluation. Writing activities within the classroom created pen pal partners between grades. One project activity included sending the project director letters containing suggestions for program improvement. Throughout the program, children received letters from their teachers and administrators on such occasions as their birthdays as well as times of improvement or success within the classroom.

Impact

During the 1993-94 school year, over 5,689 letters and packages were processed through the post office. Delivery of letters of encouragement and recognition to students had the effect of reducing undesirable classroom behavior. The postal service also provided teachers with a means of communication with other faculty and administration. Such access reduced the difficulty in implementing their Instructional Support Model of the Gideon School Improvement Plan. Overall, the project activities focused attention on and acknowledged all types of achievement taking place within the school.

Reading to Write Through Afro-American Literature

Eileen Brown
Samuel Gompers Elementary School
Grades K-6/1986-87,
Language Arts,
\$3,000

Reading to Write Through Afro-American Literature expanded a 1985-86 PATHS grant to integrate African American literature into the Language Arts curriculum. Goals of the whole-school project included increasing independent reading opportunities and writing as a response to literature. A portion of a \$20,000 Excellence in Education was also used to fund the project.

In all language arts classes, students listened to the writing of black authors, and had the opportunity to read these books independently. The students also engaged in writing projects about Africa. Twenty undergraduate students from St. Joseph's University helped the students research, write and edit their own original African stories. Consultants provided the Gompers students with a variety of activities. Linda Goss gave a story telling workshop. Nanika, a women's a capella group, and the Arthur Hall Dancers performed in assemblies and workshops on African songs, chants, and dance. The Stuart Sisters led a creative dance workshop and performed in a school-wide assembly. Musician Adimu Kuumba taught children to play African instruments, an activity that was followed by the formation of two student orchestras. Individual classes created African jewelry, musical instruments, story cloths, masks, and costumes.

The culmination of the project was an African Afahye. This festival, which included the consultants and two hundred children, dramatized African folktales, music, dance, and chants.

Impact

The library collection at Gompers went from having just a handful of books on Africa to about fifteen sets of African-oriented volumes. In addition, the Children's Librarian at the local Free Library branch wrote to the project directors detailing how approximately three to five Gompers students came in to research Africa daily for four months. Six class magazines on Africa were published. Video tapes of Afahye were made to share with other institutions.

Collaborators

Marsha Nedelman, Warren Pross, Leona Whitfield, Michael Levin, Peggy Sterling

Consultants

Linda Goss, The Stuart Sisters, Nana Koranteems and Arthur Hall Dancers, Adima Kuumba, Indigo, Nanika, Kwasi Asare, Baba Jeremiah Naba

Women, Children and Literature

Shirley P. Brown
Comprehensive Services for School Age Parents
Grades 7-12 /1986-87
Language Arts
\$3,000

Women, Children and Literature improved writing, and speaking skills of young parents and raised their awareness of standards for high quality, non-sexist children's literature. The project developed a sense of community within the school.

Author Toni Cade Bambara, who spoke to students about language arts and the role of women, was the first of many consultants to come to the school. Students from CSSAP and another school, as well as The National Institute for Adolescent Pregnancy and Family Services, actively participated in the assembly. Storyteller Linda Goss performed and gave tips on how parents could interest children with ordinary objects. Barbara Baumgartner and Mary Flournoy of the Free Library of Philadelphia lectured students on children's and young adult's literature. Sonia Sanchez sparked students' interest through her poetry reading. Authors Letta Schatz and Muriel Feelings talked about their experiences in Africa and their careers in writing. Jackie Pack performed folk songs and encouraged students to use music to build verbal skills.

Field trips to the Balch Institute, the Annenberg Theatre, and the Franklin Institute emphasizing the role of women, were followed up with related writing exercises and discussion. A bi-weekly newsletter was developed to highlight student writing. Children's and young adult's literature was regularly distributed and read. Culminating events included an essay contest on "What it Means to be a Woman" and a performance/picnic with the Philadelphia Marionette Theatre Company where performers interacted with the students.

Impact

Most students engaged in non-required reading, especially the works of the speakers. Students were introduced to women in a wide range of careers, and many were encouraged to consider other professions. Films and lectures enabled students to see women successfully combining parenting and a career. The newsletter and book collection was used again in the following year.

Collaborators

Jacqueline Coles, Leonor Pokorny

Consultants

Toni Cade Bambara; Linda Goss; Barbara Baumgartner, Mary Flournoy, Free Library of Philadelphia; Jackie Pack; Sonia Sanchez; Letta Schatz; Muriel Feelings; The Stuart Sisters; Philadelphia Marionette Theatre and Museum; Balch Institute for Ethnic Studies; Annenberg Theatre; Franklin Institute

Developing First Grade Writers Using Wordless Picture Books

Elaine T. Carty
Spring Garden Elementary School
Grades 1,5,6/1986-87
Language Arts
\$300

This project, designed for the students of the Spring Garden Elementary School, allowed first grade students to participate in a variety of oral, visual, written, and artistic activities associated with twelve selected wordless picture books. The ultimate goal of the program was to have each first grader go through all steps of the writing process to produce one or more written pieces in response to a wordless picture book.

The first graders received library cards at the R.G. de Rodriguez Branch of the Free Library of Philadelphia and visited once each month during the school year. Librarian Michelle Gendron, with the assistance of upper grade students, conducted literature sessions using wordless picture books. One hour a week from January to May, nine fifth and sixth graders read with small groups of first graders. The older children helped the first graders to draw a picture and write about a different wordless picture book each week. In the beginning, the first graders dictated their stories but, as their skills developed, they started to write their own sentences. Filmstrips on the wordless picture book techniques were shown biweekly from January to April. Small groups of students worked together to discuss their drawing frames and create a collaborative story; one group taped the narration of its story.

Five writing themes were chosen based on several of the wordless picture books. The children wrote stories and drew pictures around these themes. The culminating activity for the project was "Display-Presentation Day." During this event, the children's writings and drawings were displayed around the classroom according to the themes of *Changes*, *Noah's Ark*, *Pancakes for Breakfast*, *Truck* and *Circus*. Parents and other guests visited the classroom where the young children read their compositions, while the fifth and sixth grade helpers served refreshments.

Impact

Following "Display-Presentation Day," the first graders were invited to make their presentations to nine other classes in the school. The children showed increased enthusiasm for creative writing and were more confident in writing other assignments. The fifth and sixth grade students developed nurturing relationships with the first graders. The project director planned to continue to build affiliations with upper grade students in the following year.

Consultant

Michelle Gendron, Free Library of Philadelphia

Japanese- American Poetry

Sylvia Conn
Isaac A. Sheppard Elementary School
Grades 1-4 Special Education/1987-88
Language Arts
\$300

The *Japanese-American Poetry* project introduced and promoted respect for Japanese culture while enhancing students' overall reading ability by using poetry and story writing. The project was developed for a Resource Room class of first through fourth grade students with learning disabilities. The children were introduced to folklore, family relationships, folkways, and the food of Japan. They also studied stories, movies and poetry with Japanese themes.

The students visited the Japanese House and Garden where they tried on Japanese clothing, participated in Japanese customs, and learned some vocabulary of the Japanese language. Focusing on the literature of Japan, they used biographical sketches of Japanese authors and poets to become familiar with these writers' works, and then conducted further research on the writers in both school and public libraries. Next, they learned the art of origami and worked both individually and in groups to create their own projects including a huge swan mobile. Finally, each child wrote and illustrated a poetry book, which, after being bound, was displayed and used in readings performed for students in other classrooms.

Impact

The project generated such a strong interest in reading, that the entire class advanced at least one reading level. The students expanded their knowledge of creative writing into other areas. On their own initiative many children wrote poems and stories at home — for the sheer joy of being creative; one student won the PATHS writing award for his story and poetry. Some of the children became such proficient readers that an "Excellent Readers Group" was formed in which members read to other children.

Student Tutoring and Vocabulary Development

Howard Dolgin
John Moffet Elementary School
Grades K-6/1987-88
Language Arts
\$3,000

This project focused on increasing the oral language skills of the students at Moffet Elementary School. The goal of the project was to train upper-grade students to read to primary students, maximizing the primary students' vocabulary development through verbal interactions.

To begin the project, Moffet teachers, the Project Director along with Arlene Goldsmith, David Neidhardt, and Carol Smythe, attended four staff development meetings with Barbara Baumgartner, Coordinator of Children Services at the Free Library. Meetings focussed on vocabulary development, the project bibliography, and tutor training. Moffet primary teachers then recommended children who needed tutoring, while the upper grade teachers identified potential tutors. Initially, the student tutors met in five one-hour training sessions with Ms. Baumgartner and the Moffet collaborating teachers; after this time, students met every other week from January to May. The training of the tutors consisted in learning and practicing techniques of questioning, reading with expression, and methods for teaching sight words. The tutors then met daily with their Reading Buddies for the last half hour of the upper grade lunch break, keeping journals of their experiences. The role of tutor was recognized in two ways: first, they received special badges identifying them as tutors (the badges served as hall passes) and second, they received an award at the end of the year recognizing their efforts in the tutorial program.

Impact

Grant staff developed an extensive library collection to be used by tutors and in-classroom listening centers. During their meetings, tutors either read or viewed a VCR tape of a book and they collaborated to create questions. Quickly acquiring the techniques, they composed effective questions about the books in use. The program also led to the formation of special relationships between the Reading Buddies. Rather than depending on academic level, teachers found that kindness, patience, and interest in children were the most important criteria for successful tutors. The collaborators submitted a letter to *Instructor* magazine that described their program. Moffet received letters from across the country from teachers interested in the Reading Buddies Program.

Collaborators

Carol Smythe, Arlene Goldsmith, David Neidhardt

Consultant

Barbara Baumgartner, Free Library of Philadelphia

Richard W. Fairchild
Allen M. Stearne Elementary School
Grades 1-6 ESOL/1987-88
Language Arts
\$300

It had become increasingly evident to classroom teacher Richard Fairchild that alternatives were needed to help ESOL students improve their English speaking and comprehension skills. In response to this need, Mr. Fairchild designed a project centered on the use of puppets to establish a more open classroom atmosphere, one which was active and free of apprehension. Following his introduction and continuous use of puppets, the students demonstrated improved retention and use of new vocabulary as they used the puppets as extensions of themselves, without worrying about their accented speech, grammatical skills, and limited vocabulary. Beginning ESOL students used the puppets several times a week, while the intermediate and advanced ESOL students used them at least three times a month.

The project design incorporated the use of the puppets in a variety of activities. The project director and older ESOL students used them as props encouraging interest in telling or reading stories. Students worked in puppeteer groups of three or more composing their own fairy tales, dialogues or stories to be presented orally or in writing. Students used puppets to solve problems simulating those found in daily life; they used art supplies to create their own puppets for individual and home use; and, as a culminating activity, they used their puppets to dictate a story to the teacher which was then copied and distributed to the entire class. Everyone read this class-generated story and answered oral and written questions.

Impact

Over the course of the school year, the combined puppet activities helped all of the students improve their speaking abilities and expand their vocabularies. Many of the intermediate and advanced ESOL students expressed greater confidence in their ability to present their ideas in writing. Project Director Richard W. Fairchild presented a demonstration puppet workshop at the Penn/TESOL/East Falls Conference at Drexel University. He also gave a presentation to the Locke School faculty on using puppets to enhance language skills. Mr. Fairchild further disseminated his ideas by writing an article for the Penn/TESOL/East Falls Newsletter, and by giving a city-wide staff development workshop to the Foreign Language and ESOL staff.

Using Puppets to Teach ESOL in the Elementary School

Real Voices and Real Lives: A Study of Biographies and Autobiographies of Oppressed Minorities

Rayna Block Goldfarb
University City High School
Grade 12/1987-88
Language Arts
\$300

Role models are an important and necessary part of a child's life. *Real Voices and Real Lives: A Study of Biographies and Autobiographies of Oppressed Minorities* provided students with authentic models found in biographies and autobiographies of men and women who, despite overwhelming obstacles, achieved dignity and success.

Rather than simply using celebrity biographies, Project Director Rayna Block Goldfarb included a diverse offering of readings which reflected the social, economic, and racial composition of her students. Students selected biographies or autobiographies and kept a response journal about each book read. Students then chose to write a book review, dramatize the reading, or participate in a panel discussion about specific people or time periods. Following these experiences, they each wrote an autobiographical sketch describing important experiences in their own lives. The texts were used as guidelines for the next phase of the project; namely, writing the biography of a family member, friend or community person as a way to begin to develop oral histories of their communities. Working in small groups, the students generated question pools and practiced interviewing techniques. Finally, students were required to give a short oral presentation about any aspect of the project.

Impact

The most significant outcome of this project was that students became more aware of the impact of racial, economic and gender discrimination in the United States and other countries. Thus, they became more sensitive to discrimination issues occurring in their own community. Interesting informal class discussions generated thought provoking discussions and often facilitated further student progress beyond "class time" when students began to trade books and read beyond the class requirements. Book acquisitions funded by the project significantly expanded the library collection of biographies and autobiographies.

Jeanette Jiminez
Parkway Alpha
Grades 9-12 /1985-86
Language Arts
\$2,796

By reading about and meeting black female authors, *Books By and About Black Women* gave students a greater understanding of literature, history and contemporary events as experienced and presented by members of black American culture.

Students read a variety of classic (old and new) African American literature, including books written for young adults, or about young heroines. As chief consultant to the project, Philadelphia-based author Becky Birtha spoke with students monthly on topics that affect black women and assisted students with their own writing about these issues. Students kept journals of their readings and wrote book reviews. The history teacher provided information on the historical times of the settings of certain books. Audio-visual materials such as films about black female authors or adaptations of books were also shown in the classes. Four additional consultants visited Parkway over two months and read and discussed their works. The students also traveled to the Afro-American Museum three times over the course of the year. The students visited the Free Library of Philadelphia's 52nd Street Branch to utilize materials from their special black collection. A final activity was the research and writing of a report on a black woman.

Impact

The increased library collection, including taped versions of consulting authors' presentations, facilitated the development of similar projects for teachers and students. Students expressed greater interest in the writing of black women, evidenced by their willingness to stay after school to continue with the project after a mid-semester schedule change. Students read and re-read more books than was expected. Portions of the students' book reviews were published in an annotated bibliography distributed to other school members.

Collaborator

Richard DeNaples-Hiler

Consultants

Becky Birtha; Sonia Sanchez; Molefi Asante, Temple University; Mary Flournoy, Free Library of Philadelphia; Afro-American Historical and Cultural Museum

Books By and About Black Women

Whole Language Approach to the Teaching of Reading

Katherine A. Nell
Edwin Forrest Elementary School
Grades 2,3/1988-89
Language Arts
\$300

This project at the Forrest Elementary School provided an alternative literature-based program for students reading at least one year below grade level. The grant funds were used to purchase a Scholastic program called "Book Shelf," which consisted of children's literature, a teacher resource book, tapes, and "big books." The grant enabled an alternative reading class to meet one hour each day, and was made up of twenty-one second and third graders. The framework for this program moved students through central themes — Familiar Stories, Character's Dilemma, Problem Solving, Fantasy and Reality, and Poetry — in an effort to help them develop and improve their reading, writing, and comprehension skills.

The project began with a familiar book unit which utilized Scholastic books and books from the public library. Students learned about story sequence and mapping, while reading and re-reading familiar books. The class put on a puppet show for a kindergarten class, based on the book *Brown Bear, Brown Bear*. The students also made their own copies of the book *The Old Woman Who Swallowed a Fly* and wrote their own version of *It Didn't Frighten Me* during this unit. The second unit involved stories in which the main character had a unique problem. Students practiced making predictions and listened to teacher-made audiotapes of the stories. During the holiday season, the students made copies of the book, *The Twelve Days of Christmas* and sang the song in the school's holiday assembly program. The third unit focused on books where children had problems to solve. The students wrote their own stories about a problem they had, and their works were read to the class and displayed in the hall. Following these activities, books were read about animals and fantasy. Finally, a poetry unit was centered around *Going Barefoot and other Poems*. The children memorized poems and created a collection of their own.

The final activity of the project involved the students writing a book about themselves.

Impact

The reading levels of nearly every student increased from one-half year to two years growth. The students often commented how they enjoyed the books and "loved reading." They also liked learning about the authors' biographies and comparing illustration techniques. Students who did not participate in the alternative reading class expressed a great deal of interest in the literature when they saw the books in the homeroom. The class was continued the following year, drawing on an expanded selection of books purchased by the school.

Joseph Phillips
Thomas Edison High School
Grades 9-12/1984-85
Language Arts
\$2,300

Exploring the Poetic Domain

Exploring the Poetic Domain was a unique, cross-school grant designed to "re-awaken teachers to the art of poetry" and "restore poetry, in the minds of teachers and students as a medium for communicating the life and spirit of our times." Ten teachers and nine poets collaborated on this project.

Etheridge Knight launched the project with an hour-long presentation of his life and works to two hundred students. Following this preliminary presentation, smaller group discussions were formed and focused on the writing of poetry, and a series of staff lunch presentations were conducted on the use of poetry to help students master language. Each poet-staff luncheon was catered by Edison's food service students. Highlights of the program included a presentation by Everett Hoagland, a native Philadelphian, who read from his published and unpublished verses. Students especially appreciated his poems on Philadelphia experiences. Mr. Hoagland discussed the use of contemporary poetry in teaching. Jeanne Murray Walker, another Philadelphia poet, shared her poems from *Nailing Up the Home Sweet Home*. Teachers received copies of her book along with copies of Stephen Dobyns' works. Sonia Sanchez made her poetry come alive for both teachers and students. Ricci Lights performed her poems from *Dog Moon*, and Sandra Maria Esteves presented her selections and encouraged students to "seize the day." Both poets also talked about teachers who had touched their lives. Elaine Terranova served as chief consultant/poet for the project.

Impact

The Edison students engaged in a variety of poetry-writing activities and regularly filled the school library to hear the many poetry readings. The Project Director stated that the "school-wide creative index" had greatly improved. Every poet's presentation was videotaped and remains a part of the school's library. A visiting teacher from a private school volunteered to participate in a joint writing project the following year as a result of his observations of the students.

Collaborators

Betty Aniloff, Eva Bridgers, Juanita Douglass, Sheila Eddy, Walter Fellman, Anna Harris, Geraldine Lewis, Winnie Smith, Karen Vartanian, Alicia Wells, Charlotte Woodson

Consultants

Etheridge Knight; Everett Hoagland; Jeanne Murray Walker; Stephen Dobyns; Susan Stuart; Sonia Sanchez; Ricci Lights; Sandra Maria Esteves; Elaine Terranova, Temple University

Reviewing Children's Literature

Leonor Pokorny
Comprehensive Services for School Age Parents
Grades 6-8/1987-88
Language Arts
\$300

Reviewing Children's Literature introduced pregnant teenagers with easy to read, high quality children's literature. The program was founded on the belief that by reading enjoyable children's books, young mothers would develop a new interest in and commitment to reading: for themselves and for their children.

Students read from a large collection of children's books, including nursery rhymes, myths, legends, proverbs, poetry, and picture books. Concurrently, the students wrote short book reviews of each book that they read. The book reviews included the student's reaction to the book, reasons for recommending (or not), and the age level targeted by the book. Following this practice using book reviews, students were able to select picture books and stories to read to young children from a local nursery school. As a culminating activity, the students made simple children's books as a combined Language Arts and Home Economics project.

Impact

Initially the students did not see the relevance in reading or reviewing "kids books." However, after learning the significance of children's literature and how this experience might benefit the learning experiences of their own children, they became much more involved in and enthusiastic about the project. The students were constantly picking up the children's books to read throughout the day. After reading from a book of children's proverbs, students discussed their own cultural proverbs learned from family members, some of which were compiled into a book. Some of the students' book reviews were selected for CSSAP's Writing Across the Curriculum display in the District Office. Many of the students were so pleased with their finished books that they wanted to put them away and keep for their expected child's first book. The project continued in the following year, using the extensive book collection and incorporating trips to the local library.

Writing with a Purpose

Miriam Shapiro
James Dobson Elementary School
Grade 3/1988-89
Language Arts
\$300

Writing with a Purpose was a grant designed to improve writing skills and vocabulary through a creative, yet practical, investigation around the idea of the "acquisition and use of information."

The grant enabled participating students to purchase postage and stationery and to travel on several field trips to observe how companies gather and compile information. The third-grade students wrote letters, both collaboratively and individually, designed to acquire specific kinds of information. Students also wrote letters to a wide variety of people and businesses on the theme of career opportunities.

The results were overwhelmingly positive. The students received numerous responses, photos, coupons, and free samples from companies and famous personalities. For example, Arsenio Hall and The Philadelphia Flyers sent autographs and photos; Kraft and M & M/Mars Candies mailed company brochures; the Lipton, Pillsbury and Keebler Companies sent coupons; and both Crayola Crayons and Reissman Pretzels donated product samples. The students traveled to factories, television stations, and the Benjamin Franklin Post Office. KYW Television filmed a report in Ms. Shapiro's classroom.

Impact

Students demonstrated interest in writing far beyond the classroom assignments. The children won awards in local writing contests, wrote letters at home to celebrities and friends, and generated lists of potential correspondents. Two afternoons a week were scheduled for the writing project, and the children would not allow the plans to change for any reason. Both parents and students reported that they learned a great deal of information from the responses to their letters.

The Literacy Connection-Students and Adults

Elaine Cozewith Spitzer
William H. Shoemaker Middle School
Grades 7 & 8 Chapter 1/1992-93
Language Arts
\$542

The Literacy Connection-Students and Adults project was developed as a pilot program to provide a forum for community involvement in the promotion of literacy development. The project connected the integration of Language Arts and literacy-skills activities with the goals and activities of the Mayor's Commission on Literacy program. Seventh and eighth grade students from a Chapter 1 classroom were matched with adult mentors in the Mayor's Commission for the reading of novels and plays. Discussions concerning the literary works were facilitated through dialogue journals kept by student and adult participants. Project activities involved immersion in the dramatization and shared reading and writing of poetry. A poetry anthology was jointly composed by students and adults. Finally, plays were studied via a Readers Theater project which served as an extension of reading and writing plays. For the culminating project activity, participants produced a play created by students with the assistance of an adult mentor.

Impact

The cross-age tutoring provided student and adult groups with a unique opportunity to collaborate in reading, writing, and dramatizing literary works. This cross-generation collaboration also enriched student productions and created supportive and intimate audiences for performances. Students and adults alike said that the project activities provided invaluable experiences. Lastly, the project provided positive linkage among the Mayor's Commission, the Shoemaker School and its larger community.

Consultant

Cynthia Jefferson, Mayor's Commission on Literacy

Nancy K. Wolff
William M. Meredith Elementary School
Grades K-8/1987-88
Language Arts
\$3,000

The Meredith Press: An Integrated Approach to Reading, Writing and Art stimulated writing across the curriculum and across Meredith elementary school as students investigated the history of the printed word. Students learned various types of writing and learned the techniques of book production.

The project began with a presentation to introduce the students to the topic of the project. Readings were done by the librarian, different types of books were displayed, an overview was given, and an activity showing how to make a book out of one piece of paper was demonstrated. Later in the fall, the Project Director sponsored Meredith's first Book Fair. Five hundred people attended and funds raised were used to pay for honoraria for authors and illustrators. The week after the Book Fair was christened "No TV Week." Author Marie Winn and Larry Robin of Robin's Books spoke to the children about television watching. A papermaking studio was started in November. Consultants from Prints in Progress provided staff development and lessons for the students on the technique and history of papermaking. Field trips exposed the students to various forms of books, writing, and paper. All of the students wrote and bound at least one hard bound, sewn signature, scroll, or accordion type book. A literary journal was created to highlight the works, and a literary tea took place at the Historical Society of Pennsylvania.

Impact

All of the students showed an increased interest in writing. Older students developed mentoring relationships with younger students when they worked together on editing. Several staff members became computer literate as a result of the project. The Book Fair and "No TV Week" have become annual traditions at Meredith. Partnerships developed with libraries and book stores were to aid in the replication of the project in future years.

Collaborators

Marcia Eisenberg, Linda Hayes, Barbara Pressman, Maria Paprocky, Zelda Weisman

Consultants

Marie Winn and Larry Robin, Robin's Books; Shanna Linn, Bobbi Lippman and Mary Jean Connors, Prints in Progress; Free Library of Philadelphia; Historical Society of Pennsylvania; Library Company of Philadelphia; Philadelphia Museum of Art

The Meredith Press: An Integrated Approach to Reading, Writing and Art

School to Work Mathematics

Larry Aniloff
Kensington High School
Grades 10-12/Spring 1986
Math
\$140

For too many Philadelphia high school students, the connection between skills learned in the classroom and those needed in the workplace is never made. In an effort to help students make these critical connections, Larry Aniloff designed and led one hundred and seventy-five students in the Mission Excellence general mathematics II classes participated in the *School to Work Mathematics* project. The program helped students attain the mathematics skills, work-related attitudes, and job seeking information needed to enter the world of work. A Chapter 1 program, Mission Excellence uses the mastery learning instructional technique along with tutorial and counseling services.

As a first step, project director met personally with several companies' employment officers. Letters were also sent to employers all over the city requesting companies' mathematics testing and screening materials. A file of math entry level screening materials from responding companies was assembled and shared with the students. Students were then administered versions of the screening devices and their strengths and weaknesses were assessed. Based on the results of the students' tests, a flexible curriculum was developed around the needs of the students. Consultants from the Private Industry Council and Impact Services worked with the students teaching part of a Pre-Employment Training Program. Presentations were made on work-related attitudes, as well as job entry and survival skills.

Impact

Students were more interested in the class when they became aware of the skills necessary to obtain employment. The curriculum developed from the project was incorporated as a permanent part of the General Mathematics II class and was shared with five other Mission Excellence high schools. The project was to be continued in the following years. After discovering that reading skills were included in many of the companies' screening devices, the project was expanded to include reading teachers at Kensington. Many of the students obtained summer jobs through a Private Industry Council/Impact Services collaborative effort. These students agreed to be interviewed the following fall to discuss how well their math skills prepared them for their jobs. Revisions were made accordingly.

Consultants

Elaine Willingham, Private Industry Council; Tony Comito and Deborah Thompson, Impact Services, Inc.

Experiencing Geometry

Sheldon G. Berman
Parkway Alpha
Grades 10-12/1985-86
Math
\$1,841

Experiencing Geometry helped students investigate the shapes and principles essential to the structures found in nature and to learn about the historical development of human design and engineering. This was accomplished by providing the students with hands-on experience with manipulatives and models in a Geometry Lab.

The project began with students examining books from the Geometry Resource Library. The students categorized the books under the headings of art, mathematics and human design, and naturally occurring phenomena. The books were referred to throughout the year. The students then began to create designs and tessellations based on their study of construction principles. Students used compasses, straight edges, and two dimensional geometric dissection puzzles to inspire their designs. Escher prints were displayed and copied, and the students were encouraged to find geometry in the world around them. An extension later in the year enabled students to explore LOGO. The students developed more complex designs and rotated them on the computer. Symmetry and order and form of natural structures were investigated by "inspecting and dissecting" fruits, vegetables, shells, flowers, rocks, crystals, and pine cones. The final project activities included work with three dimensional puzzles and exploring models of the design process. The students built models of platonic solids and examined properties of nesting, symmetry, and Euler's formula.

Impact

The students realized that art work, fashion, culture, and marketing schemes could be analyzed and thought of as designs. Many students came to the classroom before and after school to continue their work with the manipulatives. Their interest and inquiry was far greater in the Geometry Lab than that found in traditional geometry textbook exercises. The students' designs were displayed at Parkway in an exhibit showing that geometry is more than just "two column proofs." The books and resources were made available to other teachers and aided in the project's replication in subsequent years.

Collaborator

Charles Howard

West Philadelphia Mathematics Newsroom

Carrie Bush and Donna Murray
West Philadelphia High School
Grades 9-12 Chapter 1/1990-91
Math
\$1,406

The *West Philadelphia Mathematics Newsroom* published a mathematics newspaper to increase students' computational, writing, and reading skills. A newsroom was set up to promote math skills by encouraging students to write about mathematics topics in a simulated work environment.

One of the key activities of the project was a site visit by students to a publishing site where they observed the process of newspaper publishing. In another activity students interviewed individuals at various job sites. The interviews included reports of the daily use of mathematics in job activities. These job site interviews led to student articles on the application of mathematical skills and concepts within various careers. Other math-related articles included charts of sports statistics, school fund raising activities, and charts of student attendance. In order to increase their analytical and problem-solving skills, the students designed and published mathematical puzzles and games.

Impact

The mathematical newspapers informed parents, students, and teachers of project activities. The students learned to use mathematical skills in a variety of occupational activities by conducting interviews at a wide range of job sites. The degree of independent student research increased and, finally, creative and artistic abilities of students emerged within the mathematics classroom through the production of the newspaper.

Collaborators

Mardys Leeper, Robert Murphey, Larry Klein

Anna May Davidson
Kensington High School
Grades 9-12/1987-88
Math
\$300

Math + Art = Excitement provided students with visual and manipulative opportunities to explore mathematics. The project sought to apply mathematics to real-life situations requiring creative problem-solving. An art teacher, a math-computer specialist, and a classroom mathematics teacher from Kensington High School collaborated on the project which focused on units for geometry, measurement, and scale drawings.

Students learned the basic concepts of each unit in the general math classes: angles, parallel and perpendicular lines, congruent and similar figures, polygons, perimeter, area, three-dimensional figures, ratio, proportion and scale drawings. Applying this newly-acquired, conceptual knowledge to computer graphics, they used the LOGO language to create geometric patterns. Then, in their art classes, they executed these original design patterns in various media like oil, charcoal, poster board and paint, collage, string, and wire mobiles. Having completed these hands-on activities, the students then wrote essays reflecting on the concepts and the process by which their art work was created.

Impact

A new level of cooperation developed among the math, computer and art teachers, which continued in the following school years. The students wrote more clearly about math concepts after experiencing them in this "hands-on" manner, and they also learned the practical applications of their technology skills. The completed art works were displayed in Kensington High School.

Collaborators

Alan Ozer, Patricia Crocker

Math + Art = Excitement

Hands on Math

Roberta Devine
Henry W. Lawton Elementary School
Grades K-6/1991-92
Math
\$1,196.

Hands on Math was a collaborative project established to implement the use of mathematics manipulative in the Lawton School. Project Director Roberta Devine, organized a math manipulative lab within her second grade classroom in order to share these materials with other teachers and student groups throughout the school.

Activities such as Chip Trading and Race to 100 used chips and Unifix Cubes to teach addition concepts, pattern blocks taught concepts such as symmetry, fractions, and design, and finally, clock demonstrations compared digital and analog time. Other whole class and small group activities provided students with hands-on experiences to learn place value, geometry, and trading concepts.

As a group, the second grade teachers provided staff development workshops demonstrating the use of base ten and pattern blocks, money kits, and geoboards in teaching mathematics concepts.

Impact

The project increased the use of cooperative learning strategies and manipulatives in math and science activities across Lawton elementary's second grade classrooms. Teachers shared activities and techniques which they found successful for teaching mathematical concepts at special training sessions. The project has encouraged the Lawton school colleagues to expand the hands-on approach to learning mathematics to other classrooms and grades.

Collaborators

Trudy Nolthenius, Rhoda Singer

Shapes and Patterns in Our World

Tamar Siff Magdovitz
Bache/Martin Elementary School
Grades K-3/1986-87
Math
\$2,950

Through this multi-grade grant, eight teachers from Bache/Martin's kindergarten through third grades helped children explore shapes and patterns as found in natural and human-made environments. Their purpose was to teach simple geometry through hands-on experiences in math, science, and computers.

First, participating teachers participated in three staff development workshops to increase their knowledge and pedagogical resources. Nancy Lee Bergey visited classrooms to do demonstrations of patterns in nature and the use of pattern blocks to create symmetrical patterns. After school, Ms. Bergey led staff discussions on follow-up activities and ideas. Alan Banbury, District Two Math Coordinator, met with K-3 teachers to discuss the use of the math manipulatives purchased for the project. Sioux Baldwin demonstrated patterns and shapes in nature.

Aquaria filled with frogs, fish, and insects, as well as silk worms provided additional opportunities for the students to observe geometric patterns and designs in living creatures. Other natural materials used to examine shapes and patterns included rocks, crystals, shells, flowers, plants and trees. Balances, magnifiers, microscopes, weights and measures were used to observe and classify materials. The students also used many of the manipulatives purchased to form patterns. Classes toured the school environment and went on several field trips.

Impact

One of the most significant outcomes of the project — the strengthened relationships among the staff — clearly emerged through the collaborative efforts and joint projects which took place over the course of the program. The purchase and instruction on math manipulatives led to use of the materials in other units. The art teacher reported that students' understanding of symmetry carried over into their art classes and was better than that of students in previous years. Various resources were saved to replicate the project in following years.

Collaborators

Miriam Barsky, Karen Zoren, Loretta Simpson, Brenda Kaufman, Cheryl Marshall, Carol Spector, Eliza Jenkins

Consultants

Nancy Lee Bergey, Solomon Schecter Day School; Alan Banbury; Sioux Baldwin, Andorra Natural Area

Focus on Problem Solving

Rosemaria McNeil
Mayer Sulzberger Middle School
Grades 7-8/1988-89
Math
\$2,972

Focus on Problem Solving was designed to incorporate problem solving throughout the mathematics curriculum of Sulzberger Middle School. An additional goal was to increase students' interest in math through the use of hands-on activities.

During regular math instruction, problem-solving was emphasized in several ways. Calculators were used to expedite the problem-solving process by eliminating tedious arithmetic. Manipulatives such as geoboards, tangrams, puzzles, and games were available to students to aid in the comprehension of abstract concepts. Estimation skills were highlighted so students could assess problems and answers. The purchase of computer software programs like *In Search of the Secret Stone*, *COMP-U-SOLVE*, and *The Incredible Laboratory Strategies in Problem Solving* allowed each student to learn computer skills as well as problem solving techniques.

A final aspect of each math class was the incorporation of writing. Students wrote their own problems which were assembled into a resource book. School-wide problem solving activities included a weekly remediation period and a "Skill of the Month." Students were taught a specific problem solving skill each month, which was reinforced in regular instruction and remediation classes.

Impact

Students' math test scores and motivation levels were increased. Materials and resources acquired from grant funds were housed in a math lab for use in future years. The remediation period and "skill of the month" activities were continued at the school. The school-wide nature of the activities helped to facilitate the difficult switch from junior high to middle school that year. Results from the project led to a three year grant to Sulzberger from the Ford Foundation for \$1.2 million dollars.

Collaborators

Alice Jordan, Paulette Bracy, Helen Carp

Mathematics in Our Neighborhood

Everline R. Smith
William B. Hanna (Guion S. Bluford) Elementary School
Grade 6/Spring 1986
Math
\$850

Mathematics in Our Neighborhood centered around the practical applications of mathematics in local business. The project aimed to help students use the four basic operations with whole numbers, decimals, simple fractions, percents, and simple and multiple-step problem solving. Further objectives included teaching metrics, customary systems, and calculator and computer use.

Two one-hour sessions were held in a grocery store where the students learned how to record weights and prices, and to determine unit price. The students also had the chance to conduct comparison price checks. Following the trips, the students made charts of equivalent measurements and kept a log of their findings. Next, sessions were conducted by Hams Frank, a local proprietor, on "How to Start Your Own Business". Six to eight students attended a session and were able to interview the proprietor, conduct a store inventory, and role play within the store. Another trip to a neighborhood dry cleaners taught lessons on estimating sums and differences using money. For one day of each month, small groups of students took part in a "field experience" at neighborhood businesses.

Learning stations were set up in the classroom, so that students could simulate businesses. Calculators, computers, telephone books, newspapers, ledgers, and play money were some of the items available at the learning stations. As a culminating project, a school store was set up and operated by the students. Students sold items, kept records, and did bookkeeping.

Impact

Students developed a greater interest in math and its applications through this partnership with neighborhood businesses. Students, parents, staff, and community members participated in the operation of the school store. The students created displays of their research that were shared with the rest of the school and a staff development session was presented by the Project Director to the school staff. The project continued in the following year, and was expanded to involve other grades.

Collaborators

Carol Shiffrin, Mildred Banks, Denise King

Consultants

Ada Goodwin, Goodwin's Cleaners; Olin Cook, Cook's Food Market; Hams Frank, Frank's Variety Store; Charles Cane, Cane's Delicatessen

Pattern and Symmetry

Katie Zimring
Samuel Powel Elementary School
Grades 3 & 4/1988-89
Math
\$300

Through previous work with the *Architecture in the Schools* program and PRISM grants, Ms. Katie Zimring discovered children's fascination with patterns in the built and natural worlds. Ms. Zimring's work also confirmed the key role that logical thinking plays in students' ability to learn math and science. Based on these insights, the *Pattern and Symmetry* project was designed to expand and enhance children's opportunities to discover basic principles of symmetry and geometrical relationships.

A team-taught class of fifty-three third and fourth graders explored symmetry and patterns in the human body, the environment (natural structures), and art (quilt patterns). They used geoboards, tangrams, pattern blocks, and mirrors to investigate patterns and symmetrical objects. Prints by M.C. Escher and kaleidoscopes provided intricate examples. The students created their own versions of symmetry and pattern by using fabric pieces, water colors, a spirograph, and spirodots. In addition, students wrote in journals about this exploration of pattern and symmetry. They even observed the line of symmetry in the very letters and words encountered in this reading and writing.

Impact

Many children who had difficulty with arithmetic were thrilled to find success with geometry. The use of mathematical manipulatives gave them a broader, more complete view of mathematics. This project's study of pattern and symmetry enhanced Powel's thematic units on sea life (varied shape of sea creatures), snow and ice (crystals), the solar system (the circle), and Ancient Greece (Greek art designs and Greek mathematicians).

Project Hydroponics

David H. Adams
Dimmer Beeber Middle School
Grade 7/1991-92
Science
\$400

Project Hydroponics gave inner city students an opportunity to plant, observe, harvest, and consume fresh crops produced as part of their science lessons. Hydroponics, a method of growing plants in gravel and vermiculite, is an alternative method for environments with short growing seasons, poor soil, and harsh climates.

Students involved in this project assembled and operated the hydroponic units and compared methods of plant raising. Throughout the project, students wrote journals documenting plant growth, and collected data which they graphed using computer software programs. Finally, student groups grew fruits, vegetables, and ornamental plants using hydroponic units.

Impact

As a result of grant activities, a partnership with 4-H was established through the Urban Gardening Program. Staff development sessions on the care, maintenance, and operation of hydroponic units were planned for the following school year. Additionally, 4-H staff members implemented start-up educational activities with the classes involved in the project. Grant funds permitted the purchase of four additional hydroponic units to implement a school-wide project during the following year.

Simple Machines, Inventions and “The Way Things Work”

Penelope Barchfeld-Venet
Samuel Powel Elementary School
Grade 2/1990-91
Science
\$435

Simple Machines provided students with the opportunity to construct and investigate simple mechanical devices. Project activities included reading about famous inventors and their inventions, examining machines used throughout the children's homes and within the classroom, and a visit to the Franklin Institute's exhibit on simple machines where the children gained hands-on experience and observed machines in action.

The students created their own simple machines using building materials such as newspaper, wheels, and wood. Later they used “Capsela” motorized building materials to create their own motorized machine inventions. The investigation of simple machines was further enhanced through writing, reading, and research activities centering on the themes of machines, inventions, and inventors.

The culminating grant activity was an “Invention Convention” held at the school to demonstrate the original inventions to other teachers, parents, and administrators who attended the convention. Also, the project resources and materials were disseminated through the presentations made at this Invention Convention.

Impact

The Grant director has continued to use activities such as dismantling machines like telephones and cameras and constructing new machines using components from these items. Students have also created big books on simple machines and inventions to be used by lower grades. The students cooperatively designed and constructed machines and imagined themselves to be “true” inventors. Overall, the Project Director found that direct experience with mechanical things broadened the students' understanding of science and the world around them.

Thomas Davenport
Edwin Forrest Elementary School
Grades 4-5/ 1991-92
Science
\$1,796

Through a blend of classroom activities, telecommunications network exchanges, and use of software tools, students involved in the *Real Science for Real Kids* project collaborated with peers in classrooms across the nation on science projects. By participating in the National Geographic Kids Network students involved in this grant project became part of a research team comprised of groups from ten classes across the United States.

Through the computer network, science groups collaborated with peers to collect data, analyze it, and make predictions. The science teams investigated topics including acid rain, water quality, and weather. Within their own classroom, the students measured the pH, chlorine, and nitrate levels of water samples, and the temperature of air. Using data acquired through computer network communications, the students compared and contrasted climate and ecology. These science investigations utilized cooperative learning, problem solving, graphing, mapping, and they enhanced the computer skills of students.

As a culmination to their year-long work, student science fair projects demonstrated the results of the peer collaboration via the National Geographic Kids Network.

Impact

Using the computer network, students communicated with other students in a variety of locations in the United States. They exchanged scientific data, as well as information on area industries and resources. Project Director Thomas Davenport became more proficient and confident in the integration of computer technology into classroom activities and instruction.

Collaborators

Kathleen T. Hanratty, Barbara J. Marshall, Harriet Weinberg

Real Science for Real Kids

Celebration of Our School Centennial with an Electrical Invention Contest

Marylouise DeNicola
Fairhill Elementary School
Grade 6/1987-88
Science
\$300

An electrical invention contest was chosen to coincide with Fairhill's Centennial celebration because 1887, the year in which the electric light bulb was invented, was the year Fairhill School was established. The contest was open to all sixth graders and served as the culminating event for the major unit on electricity in the sixth grade curriculum.

The project began with a two week intensive study of inventions, especially those devised by children. A booklet on inventions was created as a text for the sixth graders and photos of inventions were posted by the Centennial Coordinator, Marlene Mendez. "Electrical Invention Proposal Applications" were submitted by the students in which they named their invention, described how it worked or what it did, drew a diagram of the invention, and listed the materials needed to realize the invention. After-school meetings and work periods were then established for the inventors, materials were supplied, and individual student conferences were scheduled with science teacher, Gloria Henderson. When the inventions were completed, the inventors presented their creations to the entire sixth grade on "Invention Display Day." Fellow students tried out the products, and, in the final activity, project director and Fairhill principal Dr. DeNicola judged and awarded prizes of plaques, "patents" and cash to the winning inventors.

Impact

The number of students enthusiastic about science grew significantly at Fairhill. The students put in many hours toward their goal of formulating an invention. Science grades improved for many students; the sixth grade showed a marked increase in scores on the electricity portion of the city-wide test. Fairhill's sixth grade science class was enhanced by books about inventions and numerous types of materials. Dr. DeNicola planned to continue the contest and expand it to include fifth graders.

Collaborators

Gloria Henderson Benson, Marlene Mendez

Edward P. Guy
S. Weir Mitchell Elementary School
Grades K-5/ 1987-88
Science
\$3,000

Throughout *S. W. Mitchell Greenthumbs - An Experiment with Plants*, Mitchell Elementary School was transformed into a plant haven. The project was designed to foster an appreciation for the aesthetics, necessity, pleasure, and practical knowledge of working with plants. Students accomplished this by engaging in "hands-on" activities in Mitchell's "growing areas" plant houses, classroom terrariums, hallway flower pots and within the children's homes. In setting up the growing areas, the Project Directors looked to consultants for advice. Horticulturist Earl Mosley conducted workshops for teachers and oversaw the construction and progress of the plant house units. Dr. Richard James of the Schuylkill Valley Nature Center and David Kipphut of Lincoln High School also led staff development meetings on plants. The Mitchell Greenthumbs then worked on cultivating vegetable and flower plants. Anecdotal records of individual plant progress were kept as well as charts and graphs. Students also studied the environment, focusing on why certain plants were grown in certain regions. Cultures that relied on various crops were researched and reported on. As the project progressed, students became familiar with parts of plants and the habitats necessary for maximum growth. Nutrition lessons were planned around the vegetables grown, and art projects focused on drawing plants and dried plant projects.

Impact

Students were able to conduct research from the various growing areas. By the end of the project, they were also able to write instruction lists for growing different plants. Students reported their results to other class members with enthusiasm and expressed pride in their accomplishments. The project was continued with revenue from plant sales and funding from the Home and School Association.

Collaborators

W. Mark Mosley, Jean O. Engs, Marci Resnick

Consultants

Earle W. Mosley and Richard James, Schuylkill Valley Nature Center; David Kipphut

S.W. Mitchell Greenthumbs - An Experiment with Plants

Improving Learning through Classroom Aquaria and Terraria Systems

Gloria Henderson Benson
Fairhill Elementary School
4-5 ESOL/1993-94
Science
\$500

Children and teachers built classroom aquaria and terraria containing various plants and animals such as chameleons, crickets, and guppies. A related collection of books, charts, and pictures provided children with reading and visual materials to extend and reinforce their science concepts.

Weekly science lab activities were augmented by individual observation of animals within the classroom environments. Children planted and grew seeds, and maintained journals of the life cycle, food chain, and environmental characteristics of each environment in the terraria systems. They constructed charts to display their observations after comparing each system. Students also developed and carried out a science fair project related to the life science concepts discussed during project activities.

Impact

As a result of the project, parents contacted the science coordinator to receive instructions on how to replicate the project at home. Grant funds provided teachers with an opportunity to purchase materials to create terraria and aquaria environments within each classroom. The project activities developed during this grant became a part of the school's life science curriculum.

Collaborator

Marylouise DeNicola

Children Write About Their World

Rhoda Kanevsky
Samuel Powel Elementary School
Grades K-4/1986-87
Science
\$3,000

During the *Children Write About Their World* project, every class raised the eggs and larvae of monarch butterflies. The children researched and wrote about the life cycle and habits of the butterflies. Students also went on frequent neighborhood walks to catch and raise grasshoppers, praying mantises, and ladybugs. They also collected and classified leaves, seeds, and flowers around the school and at home. The students took a trip to the Academy of Natural Sciences after completing a unit on bones, fossils, and dinosaurs. Older children studied ice, snow, and snowflakes, including observing their crystal formations under microscopes. The arrival of spring enabled students to explore nature in the community and through poems and Impressionist paintings. Many students wrote their own science poems. Third and fourth graders researched and wrote about underwater life, culminating with a trip to the Baltimore Aquarium. The final activity of the project was an in-depth study of silkworms. Each child kept a tray of silkworms on his or her desk to observe and was encouraged to bring the silkworms home over the weekends to continue monitoring their growth and changes.

Impact

The children published many books about their scientific research and increased their reading of nonfiction books. They also kept a journal of all of their observations and drawings. The booklets were shared with members of the Philadelphia Teachers' Learning Collaborative, and the silkworms and a fact sheet written by the Project Director were distributed throughout District 1. Ms. Kanevsky, who continued the project in subsequent years, was invited to participate in the National Resources in Science project at the Smithsonian Institution to share her findings.

Collaborators

Judy Buchanan, June Merrit, Judy Mintier, Katie Zimring, Sabra Cameron, Liz Izenour

Consultants

Edward Chittenden, Educational Testing Service; Hubert Dyasi, Science Education Program for Africa; Bertram Strieb, LaSalle University; Faye Beauchamp, Community College of Philadelphia; Vivian Schatz, Academy of Natural Sciences

An Inner-City Greenhouse

Marilyn Krupnick
Roberto Clemente Middle School
Grades 6-8/1985-86
Science
\$2,978

Initially, the project "*An Inner-City Greenhouse*" was developed to create student interest in horticulture, especially since their areas of the city was devoid of any greenery. What began as a basic "greening" project, though, soon evolved to a student-driven project which injected new life into the school and its surrounding community. As the first step in the project, indoor facility equipped with artificial lighting and optimal growing conditions was installed at the school.

The project began with the formation of the Horticulture Club. Club members met every Monday, and learned planting techniques and equipment usage. They also began to bring in plant specimens and seeds. Next, plant mobiles were constructed, and students focused on the importance of light sources.

Poinsettias were sold before the winter holidays. In January the Horticulture Club investigated various kinds of seeds. The members planted seeds and studied, graphed, and charted growth patterns. By spring, students learned about bulbs and tubers, and Easter plants were sold. The club members were able to instruct the customers on when to plant and how to care for their purchases. Transplanting seedlings was the next topic for the club. Students were amazed at how much could be produced from a tiny seedling. Regular classes participated in greenhouse activities three days a week. The club members held a greenhouse opening in May to discuss their work and display their results. The culminating activity was a closing plant sale. Club members carefully labeled plants, gave advice on plant care, and collected money.

Impact

An immediate result of the project was experienced by participants as hundreds of teachers and students bought plants at the closing plant sale. Over one thousand plants were sold in two days. The profits from the sale were used to restock and perpetuate the greenhouse in subsequent years. Students' interest in horticulture reached beyond school, as they continued to cultivate plants at home. The Horticulture Club was expanded to include the entire seventh grade. Additional plant, flower, fruit, and vegetable sales were planned. Consultants from the Horticultural Society were invited to work on the project in the following year.

Collaborators

Clara Tolbert, Ruth Baronda, Jim Butler, Julie Woodlin

Colleen M. McDade-Citrino
John Welsh Elementary School
Grade 1/1990-91
Science
\$300

In an effort to help first-grade students understand and explore "where food comes from," Colleen Mcdade-Citrino sought and received a grant for her project, *Exploring the Earth's Bounty: From Garden to Table*. This interdisciplinary project began through a partnership established with the Pennsylvania Horticultural Society, a Growlab was made available allowing the children to grow vegetables from seeds within their own classroom. Students charted the growth rates of the vegetables in graphing activities. Next they wrote about their experiences and began to collect articles and recipes relating to plants. On a trip to a local farm, the students examined the growth, harvest, and transport of food products to area supermarkets. Students participated in the Philadelphia Junior Flower Show and, at the end of the project, they made a classroom display with examples of the vegetables grown and the books from which they drew during the program.

Impact

Use of the Growlab provided students with the opportunity to produce an indoor garden. The project developed extensive knowledge of both the food distribution system and the plant growth cycle. As a result of this project, teacher Colleen McDade-Citrino formed a partnership with the Pennsylvania Horticultural Society which led to planning and continuation of project activities.

Consultant

Pennsylvania Horticultural Society

Exploring the Earth's Bounty: From Garden to Table

Stars in Our Schools

Patricia J. McMillan
Samuel W. Pennypacker Elementary School
Grades 4-6/1987-88
Science
\$2,907

This activity-oriented project integrated teacher professional development and student learning through the study of astronomy. Project Director Pat McMillan collaborated with and initiated this program with teachers and students from other District Six elementary schools: Steel, Wister, Fulton, Dobson, and Pennell. District Six donated \$6,950 for the purchase of the inflatable Star Lab Planetarium System. The Philadelphia Extension of Penn State's 4-H Club program provided consultation to the teachers and students involved in this program.

In order to use the Star Lab Planetarium to its full advantage, staff development sessions on astronomy were conducted for all participating teachers. Derek Pitts of the Franklin Institute's Fels Planetarium led a workshop on astronomical concepts specifically geared toward teaching fourth through sixth grade children. Students and staff also received a wealth of knowledge from the other consultants: Elmore Hunter of Penn State gave demonstrations on rocketry, teaching the safety code of rocketry, rocket constructions, types of rockets and the procedure for operation and firing of model rockets; and Kofi Burgess and Bob Summerfield gave classroom demonstrations on constellations and slide shows of the solar system. Each class visited the Star Lab planetarium at least once. They also had the opportunity to use computer software focusing on astronomy. Students wrote reports, planetarium observations, and poetry about astronomy. A culminating activity centered on a rocket launch using the lessons taught by Mr. Hunter.

Impact

The Star Lab Planetarium generated a great deal of interest in science for both students and teachers. Student learning went beyond the classroom through home-based experiments such as scanning the skies and documenting constellations. Follow-up plans included more visits to the Star Lab for every class, and a night time sky watch involving parents and members of other schools. At the conclusion of the program, the six collaborating teachers planned to reach out to non-participating schools to assist in creating hands-on astronomy activities.

Collaborators

Josephine Williams, Susan Longenberger, Carolyn Minor, Yvonne E. Thompson, Patricia Katz

Consultants

Derek Pitts, Franklin Institute; Bob Summerfield; Elmore Hunter, Cooperative Extension of Pennsylvania State University; Kofi Burgess

William C. Metz, Frank Boynton
Cook-Wissahickon and Shawmont Schools
Grades 5 & 7/1991-92
Science
\$1,187

Middle level students became researchers in the *Stream Teams* project. Students collected and tested water samples in the Fairmount Park section of the Wissahickon Creek, as teachers led them in extensive hands-on experiments designed to connect classroom experiences to real-life science programs. Twice a month, students from the Cook-Wissahickon and Shawmont Schools collected and processed water samples from different testing locations along the Wissahickon Creek. Students performed activities designed to increase their concrete experiences with data collection and analysis, such as water quality tests measuring pH, temperature, dissolved oxygen, and carbon dioxide. The results of these tests were used to predict the types of macro-invertebrates found in the creek. The students also completed detailed maps of collection sites. Data collected by these groups was disseminated monthly to local and federal agencies responsible for monitoring water quality. Data regarding acid precipitation was shared with program ALLARM, a state-wide acid rain monitoring program based at Dickinson College in Carlisle, Pennsylvania.

Impact

The students and teachers involved in this collaborative project were able to incorporate environmental science investigations into their curriculum. Experience gained from the PATHS/PRISM grant served as a foundation for the implementation of a more in-depth investigation funded by the Environmental Protection Agency. The EPA grant included a two-year investigation of the Wissahickon Creek conducted by seven Philadelphia Schools.

Stream Teams: A Research Study of the Wissahickon Creek

**Improving
S.C.I.E.N.C.E.
(Self
Confidence
In Exploring
New Science
Experiences)**

Denise Montell
Anne Frank Elementary School
Grades 1-4 Special Education/1991-92
Science
\$600

Through the use of manipulative materials, science came alive during this year-long grant project for students of the Anne Frank elementary school. Activities addressed such topics as properties of air and flight, electricity and magnetism, and physical concepts such as force, friction, and energy. Using hands-on methods of exploration and learning, students made predictions, collected data, and reported results in written and oral form. Staff development sessions instructed teachers in how to apply the various instructional materials to the scientific concepts.

Students also investigated a variety of scientific concepts such as the study of electrical circuits and switches, the construction of simple machines, classification of powders and crystals, and an exploration of the human senses.

Impact

Students developed problem-solving strategies through their experimentation and construction activities. In discussions of scientific concepts and their own findings, students demonstrated interest in the subject of science and improved their skills through engagement in hands-on activities. Finally, teachers involved in the project noted that their own observational skills had improved through the collaborative activities.

Collaborators

Carol N. Abramson, Susan Y. King, Leslie C. Moses

**Gardens of
the World**

Holly H. Perry
Alternative Middle Years-6 (AMY New Covenant Campus)
Grade 7/1989-90
Science
\$1,500

Science and social studies teachers from AMY-6 teamed up with consultants from the Awbury Arboretum to explore the relationship between geography and gardening. The project's activities were designed to strengthen student skills in gardening in the context of preparing for both the Philadelphia Junior Flower Show and George Washington Carver Science Fair in following years.

Students involved in the project designed and constructed a bulb desert and maintained Japanese, cottage, and herb gardens. Critical thinking skills were emphasized as students participated in collecting and analyzing data, predicting outcomes, and planning the completion of the five types of gardens.

Various project activities included creating flower maps and demonstrating various types of flowers indigenous to the world gardens. The children also learned about and identified indigenous plants of Philadelphia and other locations and studied cultural traditions related to gardening experiences. Comparisons were made between continents by contrasting Japanese and European gardens. Students kept logs of gardening activities throughout their participation in the project.

Consultants from the Awbury Arboretum helped the seventh grade social studies and science teachers plan, select and maintain the five varieties of gardens.

Impact

The teachers incorporated the gardening activities developed during the project into seventh grade science and social studies classes, and established a long-term relationship with the Awbury Arboretum. The school continued to maintain the outdoor gardens constructed by the project participants, and a gardening club was offered as an after school activity.

Collaborators

Carlstene Pryer, Eugene Campher, Katie Ruth Myles

Consultant

Awbury Arboretum

Refurbishing, Renovating, and Reactivating the Greenhouse

Concetta (Tina) Petrone
South Philadelphia High School
Grades 9-11/1989-90
Science
\$2,278

Students in this project reactivated a greenhouse at South Philadelphia High School that had been closed for asbestos removal. The greenhouse facility was designed to maintain a controlled environment for experimentation in botany, genetics, photosynthesis, hydroponics and the effects of pollution. This refurbishment of the facility permitted the inclusion of a botany curriculum into classroom activities.

Through access to this resource, students designed and carried out science fair projects in plant science. For example, in project activities students initiated and observed plant growth, and studied collections of seeds, seedlings, and bulbs in different settings. Through observation and data collection, the students determined optimum moisture, temperature, light, and mineral content conditions for plant growth. They experimented with alternative plant propagation using leaf cuttings, roots, and stems. These students used this collected data for graphs and computer analysis included in their reports.

By growing additional plants and flowers, students defrayed the maintenance cost of the facility. Furthermore, a local nursery, Frank's Nursery, provided consultation to students and discounted materials used in the project.

Impact

Students in three classes involved in project activities submitted projects to the Philadelphia Junior Flower Show winning first, second, and third places in every category. School Fairs displaying the students' work were established in Center City Philadelphia through the months of November and April, and students entered projects in the Carver Science Fair in April. In collaboration with this project, Apple donated computers for use in science activities.

As a direct result of the funding of this project, Apple Computers donated over \$180,000 in hardware for use in the greenhouse and other science activities. Eventually, over one-half million dollars in grants came to the science program at South Philadelphia; Ms. Petrone identifies the PATHS/PRISM grant as the catalyst for this additional support.

Ms. Petrone has presented the development and outcomes of her greenhouse project at three National Education Computing Conferences since the project's completion.

Collaborators

Sheridan Carr, John DiFiori, Samuel L. Williams

Consultant

Frank's Nursery

Science a La Carte

Rita Rice
District 5 Office
Grades K-8/1990-91
Science
\$3,000

Science a la Carte provided teachers with ready access to the materials needed to teach science in grades one through three. At staff development sessions, teachers acquainted themselves with the materials necessary to teach each science concept identified on the city-wide checklist for science. The materials, stored on special carts, were easily transported between classrooms and maintained from year to year. This easy transport of uniform instructional materials assured greater consistency in science instruction across classrooms and grades.

The project developed concrete science activities providing students with tangible experiences relating to the scientific concepts studied. Students' written descriptions of the concepts were used to assess the effectiveness of the hands-on instruction.

Impact

The teachers involved in the grant activities received hands-on materials, ideas for new activities, and staff development sessions on assessment strategies. Project Director Rita Rice observed improved communication with teachers in twenty of the District Five schools. Greater uniformity of instruction and assessment was achieved by using the readily available hands-on materials.

Collaborators

Kathleen Taggart, Michelle Mailman, Carol Smythe

**Establishing
and
Replicating a
'Living
Room'
for
Implementing
and
Supplementing
Elementary
Science
Curriculum**

William H. Richards, Gloria Bush
Thomas Durham Child Development Center
Grades Pre-K-5/Spring 1986
Science
\$2,984

Imagine creating a "living room" designed for plant and animal life in a school building. Durham staff did exactly that in this collaborative grant project in order to help students understand plant and animal life cycles.

The project began with the creation of Living Room Committees for each classroom. The committees were assigned duties for the development and care of the Living Room. The students kept journals of their committee work. Constructing the Living Room was the next step in the project. The Project Directors, custodian, and student volunteers worked on renovating a large room for the animals, creating a smaller, connecting see-through aviary. The workers built shelves and storage areas to house all of the resources. The Project Directors also gave eleven thirty-minute staff development sessions on bringing Living Room activities into the classroom. Art projects were coordinated with Living Room topics. First, third, and fourth grade students wrote letters of invitation to show other schools how to develop a Living Room. Students created books and "how-to" activity cards on categories studied: plants, tropical fish, birds, snakes, amphibians, mammals (chinchillas, gerbils), and insects. A plant and animal sale was held at the end of the year to generate funds for upkeep of the Living Room.

Impact

As a result of this project, several other schools considered setting up Living Rooms. A videotape of Durham's room, students' "how-to cards" are available for guidance. In addition, manuals, created by Mr. Richards titled "Getting Started," "Curriculum," "Writing Enrichment," and "Plants and Animals" were distributed throughout District Two. The students' scientific writings were displayed throughout the year. The Living Room project raised money by selling plants and animal offspring. The project was continued in the following years by using many of the purchased resources and expanding to include Durham's literature program.

Collaborators

All K-5 teachers and the principal at Durham

Consultants

Judy Herman, Please Touch Museum; David Brown, Academy of Natural Sciences; Laura Lee, Schuylkill Valley Nature Center; Sanford Caesar, Franklin Institute; Bob Weintraub, Martin's Aquarium; Tony Amato, Temple University; Don Steinberg, Fred Locke, Travelling Educational Services to the Schools

Barbara Ruth
John B. Kelly Elementary School
Grades K-4/1985-86
Science
\$3,317

Halley's Comet — An Event for Children to Remember used a once-in-a-lifetime cosmic event to stimulate a lasting interest in astronomy. One thousand students, staff, and families of the J.B. Kelly Elementary School participated in the project.

The project began with staff development meetings led by Derek Pitts of the Franklin Institute's Fels Planetarium, and Sioux Baldwin of the Andorra Natural Area. The staff developed a heightened awareness of the comet and astronomy. In October, children, parents, and staff at Kelly were invited to the Franklin Institute. The Planetarium was a new experience for many and provided a basis for star-watching. Family Star-Walks were conducted several times, led by the Project Director and Ms. Baldwin. The grant funds provided the school with fifteen astronomical binoculars to enhance the star gazing. During the colder months, students read stories and folktales about the constellations. They also learned about the solar system, discoveries in astronomy, and space exploration, using books, magazines, and films. A display showing the scaled distances from the planets to the sun stretched through the school's hallways. A newsletter, "Stargazette," was published to discuss the astronomical activities.

Impact

The entire staff united to work on the development and year-long implementation of this collaborative project. The project increased the level of parental involvement at Kelly. Many braved cold December evenings to catch a glimpse of Halley's Comet. Students and staff continued to discuss happenings in the night sky throughout the year. The books, films, maps, and magazines greatly enhanced Kelly's library collection. Several classes published their own versions of "star stories" about the constellations. Teachers kept a log of their activities and materials that were later kept in the school's I.M.C. The project was continued in future years, expanding to include more day-time and horizon activities and involving other local schools.

Collaborators

All members of the J.B. Kelly staff participated in some aspects of the project.

Consultants

Derek Pitts, Franklin Institute; Sioux Baldwin, Andorra Natural Area

**Halley's
Comet — An
Event for
Children to
Remember**

Parent Involvement/ Box Garden Project

Rose Shambourger
Mayer Sulzberger Middle School
Grades 7-8/1990-91
Science
\$2,500

Parents in this project became more closely tied to their children's classroom life by designing and constructing box gardens with them for home and school. Extended family members — including grandparents, aunts, and uncles — assisted in the construction and maintenance of the garden boxes.

In the first project activity, students and parents learned how to construct box gardens. Horticultural specialists provided educational sessions and workshops on growing and caring for plants. Elmore Hunter, Director of the Philadelphia Cooperative Extension of Pennsylvania State University's 4-H Club program, next conducted science and agricultural lessons. The consultants and participants visited a plant nursery and selected specimens for their box gardens.

Students conducted research projects on the growth and care of their selected plants, and integrated art work, diagrams, and writing into their reports. To reinforce the classroom activities, parents and students constructed gardens at home.

Plants grown in the classroom were transferred to decorated box gardens in the students' homes. The final activity was a luncheon arranged to celebrate parent and community involvement in the project activities.

Impact

An immediate impact of the project was the increased parent participation in school activities. A trip to Penn State University introduced both the children and their parents to the college campus and its academic and social activities. Extended family members also became involved in school activities, acting as mentors for other students involved in the project.

Consultants

Elmore Hunter and Bruce Richards, Penn State University
Extension/4-H

Researching the Northeast

Joan Arno
George Washington High School
Grades 10-12/1992-93
Social Studies
\$500

This community oral history project called on students to become authentic historians by collecting and researching data from interviews of senior citizens in the Northeast section of Philadelphia. Students in AP American History class and High Tech classes engaged in research and computer-related activities to produce oral history documentation.

Harry Silcox, local historian and Director of the Pennsylvania Institute of Environmental and Community Service Learning, fostered the development of a collaborative project between the Verreeville Historical Society and George Washington High School. This partnership was made possible through a grant to promote partnership activities between schools and historical societies. By contacting Leon Sharlip, President of the Verreeville Historical Society, Joan Arno coordinated the intergenerational history project with activities of the Historical Society and the Northeast History Coalition.

Students interviewed senior citizens and edited the audio, pictorial, and video accounts of these interviews. Using portfolios and computer-generated records of oral histories, the students created a student publication on the history of the Northeast. These activities successfully propelled students to become active participants in the process of documenting actual historical accounts.

Impact

As a result of project activities partnerships were established with various historical societies and agencies throughout the Northeast. These partnerships, rooted in the discovery of local history, were integrated into the American History curriculum. Students learned to produce historical documents and oral histories through an interview process which fostered the communication of primary accounts of historical events from senior citizen to adolescents.

Collaborator

Paul Hampel

Consultants

Verreeville Historical Society; Ury House; Medical Mission Sisters; Virginia Thompson, Lafayette House; Frank Neumann, Ryers Museum

Philadelphia - International City

Lois Brady
Civic Center Museum
Grades 4-12/1985-86
Social Studies
\$920

The primary goal of the *Philadelphia - International City* project was to enlighten teachers and students to the significance of Philadelphia's ports to the city's economic and social health. A secondary goal of the program was to motivate teachers to follow events and activities of the ports and to use them in the classrooms.

Initially, the project collaborators and consultants worked to develop background notes on the Philadelphia ports. To introduce these materials, project organizers conducted a district-wide workshop for teachers. Following this, they concentrated on the creation of teaching materials for grades ranging from fourth through twelfth. Lecturers were evaluated and selected to speak at the teachers' workshop. The workshop lasted a full day and included a tour of the Delaware River on *The Spirit of Philadelphia*. A curriculum guide, "Philadelphia - International Port Authority," was created by the Project Director and her collaborators. The booklet contains research, activities, primary sources, diagrams, and suggestions for follow-up.

Impact

Seventy teachers from around the district participated in the workshop. Their evaluations of the program were very positive. Copies of "Philadelphia - International Port City" were given to the Social Studies Curriculum Office and were made available to other teachers visiting the Civic Center Museum.

Collaborators

Reiko Gaspar, Ed Grusheski

Consultants

Bill Ward, Philadelphia Maritime Museum; Ezra Staples, Area Council of Economic Education; John Haines, Philadelphia Port Corporation; William Bennington, Delaware River Port Authority; Ella Torrey, Philadelphia Council for International Visitors; Hal Freeman, Philadelphia Department of Commerce

Clementine Bettis
Ada H. H. Lewis Middle School
Grade 8/1989-90
Social Studies
\$2,200

African American migration from the south to Philadelphia was the subject of study in this collaborative grant. Designed by three teachers, the project engaged students in the recording of oral histories by interviewing family members in order to understand the historical significance as well as discover their own personal connections to the African American migration experience.

Activities such as journal writing, creating time lines, making maps, and collecting documentation resources from magazines, newspaper, and other literary sources helped students trace their own family histories. Parents visited the classroom for a school-wide activity focused on the documentation of family histories. Lectures, presentations and workshops by consultants gave the children access to additional community resources in learning about their migrant ancestry. Activities focused on community history and Afro-American memorabilia and artifacts. Entertainer Melba Moore joined her sister, Project Director Clementine Bettis, in performing exemplary songs in a special musical performance. Ms. Bettis also provided information on literary works preserved from various historical periods in black history.

In a trip to the Balch Institute, the students viewed a collection of toys, dolls and artifacts relating to black history. They made a trip to view "Let This Be Your Home: African American Migration to Philadelphia, 1900-1940" which reinforced and enriched their learning experiences on black migration. Consultants such as Linda Wright Moore, a *Daily News* columnist and Temple University professor, provided students with assistance in planning a newspaper to publish a collection of student writing, family trees, time lines, and pieces of documentation collected throughout the project activities.

Impact

Project activities introduced students and faculty to a variety of resources on black history available within their community. Students documented oral histories and published them in their own newspaper. Plans were made to extend project activities, incorporating them into a unit on European immigration.

Collaborators

Cassandra Shearlds and Ernest Parker

Consultants

Linette Morman, New York City Writing Project; Linda Wright Moore, *Philadelphia Daily News*; Hargis V. Thomas

I've Got the Migrant in Me: Black Migration to Philadelphia 1915-1940

Establishing a Local Deaf History Archive

Amy L. Cohen
Abraham Lincoln High School
Grades 9-12/1988-89
Social Studies
\$300

Establishing a Local Deaf History Archive was developed to preserve the folktales, history, and culture of the deaf community. One of the initial goals of the program was to help students observe and understand how the deaf use American Sign Language as an appropriate adaptation of oral tradition. As a result of the program students produced in its entirety, a video archive, "Local History of the Deaf Community" as well as written abstracts of the video interviews which they conducted.

The process of creating the video archive of the deaf began when eighteen hearing-impaired students at Lincoln High School watched two commercially prepared videotapes on the deaf community: "Identity" focusing on issues particular to a person who is a member of the deaf community, and "The World According to Pat" showing a performance of deaf people describing their experiences of living in deaf school dormitories. These tapes were also shared with hearing students registered in the American Sign Language classes at Lincoln.

Next, the students researched events in American history dealing with the deaf community. Students practiced interview skills, learned how to operate a video camera, developed lists of questions and learned how to use them, arranged "blocking" for filming, and, finally, practiced taping interviews. Following this extensive preparation, the students broke up into small interview groups with one as camera operator, one conducting the interview, and the others asking questions while acting as members of the audience. Their interview subjects were a Lincoln hearing staff interpreter who was a native ASL (American Sign Language) user, a deaf teacher and a deaf actor/pantomime artist. Following the interviews, students worked on speeches and essays based on the ideas and information from the interviews and speakers.

Impact

The research on history and the deaf community suggested additional, interesting interviewees for the students. After reading *The Diary of Anne Frank* and attending a seminar on the Holocaust, one student decided to seek out any local deaf survivors. Another student wanted to locate Philadelphia students who were participants in the "Deaf President Now" strike at Gallaudet University. Ms. Cohen, project director, continued the project by contacting deaf community groups to find other interview subjects. The archive tape thus produced was circulated among members of the All Souls' Church for the Deaf. As a result of this project, three Lincoln High School students were among the winners of the First Annual Essay and Oratorical Contest for the Hearing Impaired.

Ellen Hart
John Wister Elementary School
Grade 1/1984-85
Social Studies
\$572

Who Are the People in Your Neighborhood?

Who Are the People in Your Neighborhood? was designed to give first graders the opportunity to explore and learn about the workers in their community. The project provided students with first-hand experience of nineteen work places in the Germantown neighborhood.

The nineteen work place visits covered the categories of workers in the school, public service, health care, factory, and business fields. At each work site, students were given a tour and had a chance to interview workers. As the project progressed, a large map of the community became the center point of the first grade classroom. In the beginning, students practiced reading a map and marked off where they lived. They later kept journals of their observations. After each field trip, the students placed a labeled building on the map to represent the work site. During the final two months of school, the map was displayed in the main hallway of Wister School. Staff, parents, and community members were able to see the full extent of the students' neighborhood travels. A data chart was used to organize the children's research, listing the job, number of workers, type of work clothing, sex of workers, and specific types of work done at each site. Lego sets were purchased with grant funds. Students used these to create communities complete with streets, buildings, homes, vehicles, and of course, workers.

Impact

The neighborhood map became a permanent fixture at the entrance to Wister School. Students' language skills increased as they became comfortable interviewing workers and learning technical vocabulary of various professions. Parents played an active role in the project by accompanying the class for each field trip. Several businesses that were visited gave samples of their products to the children and developed a new partnership with Wister. Other teachers planned to set up visits. Students developed new career aspirations. The project was continued the following year, adding literature and larger scale models.

The Spirit of Colonial Philadelphia

Joyce Kail, Goldie Lieberman
Feltonville Elementary School
Grades 1-6/1984-85
Social Studies
\$9,441

What was life like for colonists in this area of the original thirteen colonies? What did they do? What kind of music, art and literature did they enjoy? These are some of the questions that students involved in *The Spirit of Colonial Philadelphia* attempted to answer. The project was developed to broaden the students' experiential background of Philadelphia and Pennsylvania history and, through the use of speakers and field trips, bring history to life.

The students were immersed in the colonial time period by examining archeological artifacts and historical documents, listening to colonial music, observing colonial art, and listening to literature that described that time period. Consultants Wyk Richards and Cynthia Little shared an extensive amount of information about colonial times with the classes. Students wrote poems and stories and illustrated their thoughts about this era. Various classes had the opportunity to visit Bartram Gardens, The Pennsylvania Historical Society, Mother Bethel Church, Historic Philadelphia, Pennsbury Manor, Ripley Farm, and the Amish Country in Lancaster. The entire school learned about the sites when the experiences were shared during morning meeting. A timeline of the history of Philadelphia was constructed and displayed throughout the hallways of Feltonville School. Timelines were also used within classes to show family histories. Students interviewed family members and used primary and secondary sources to conduct their research. A culminating activity for the project was a school-wide pageant where students shared poems, songs, samplers, illustrations, and famous writings about colonial times.

Impact

Students' enthusiastic response to the program indicated they became much more interested in history as a result of the project. They also became aware of their own cultural heritage. Intermediate students videotaped many of the field trips in order to create a "living library" on colonial history. A collection of the students' written work was published and a photo album was put together as an archive of the experience. These resources were made available to other schools. The project was continued in future years, expanding to include the Federal period and the nineteenth century.

Consultants

Wyk Richards, University of Pennsylvania; Cynthia Little, Historical Society of Pennsylvania; John Alviti, Atwater Kent Museum; Bartram's Gardens; Mother Bethel AME Church; Pennsbury Manor; Ripley Farm

Ruth E. King
Robert Fulton Elementary School
Grade 3/1990-91
Social Studies
\$2,406

Ruth King, Fulton elementary classroom teacher, wanted her third graders to learn about other cultures throughout the world. But instead of the usual books and filmstrips comparing climate, family life, and a day at school, she wanted her students to have a *real* feel for what life was like in other places. Hence, she and some colleagues at Fulton designed *Through a Child's Eyes: A Sensory Approach to Cultures of the World*. As a result, students at the Fulton School were exposed to the literature, art, food, music, and dance customs of seven cultures across six continents. Teachers developed various hands-on activities and performances to increase student involvement in the investigation of these cultures. Museum trips to the International House, the Civic Center Museum, and the Afro-American Museum exposed the children to diverse art forms and historic legacies.

Students involved in this project participated in musical, dance and dramatic performances representing each culture. In addition, they examined geographic conditions of the countries from which each culture originated. Journals were used to record recipes as well as responses to literature, art, music, and dance performances. Each month, performances of ethnic dances and folk songs introduced activities and information of the various cultures through creative expression.

The culminating project activity was a school-wide international fair celebrating cultural diversity and unity which included a collaborative dance performance of the entire school.

Impact

The Fulton School students and staff became deeply involved in all grant activities celebrating cultural diversity. Teachers incorporated hands-on activities across the curriculum to teach math, science, and social studies.

Collaborators

Marge Neff, Rebecca Dondero, Josephine Williams

Through a Child's Eyes: A Sensory Approach to Cultures of the World

Integrating Primary Source Material into the Social Studies Curriculum

Paula Paul
William W. Bodine High School for International Affairs
Grades 9-12/1985-86
Social Studies
\$3,000

Before the recent wave of social studies curriculum revision, including the development of the new world history curriculum for Philadelphia high schools, teachers were pretty much on their own in finding ways to move beyond the inevitable limitations of the history textbook. Fortunately for the students at Bodine High School in 1985-86, they had a teacher who was innovative enough to access and introduce them to several of the area's rich cultural resources through *Integrating Primary Source Material into the Social Studies Curriculum*. Primary sources such as maps, photographs, diaries, and documents were purchased to enhance the social studies curriculum and "bring to life" the study of history and other cultures.

The resources were selected from a list of materials created by the Social Studies Department at Bodine. The Project Director visited book stores in Philadelphia, Boston, and New York to purchase the items. Over two hundred historical resources of photographs, cassettes of old radio programs, posters and books were bought. Each resource was indexed on a 3 X 5 card with an annotation of its contents. New materials were frequently presented at faculty meetings. Consultants from the Pennsylvania Historical Society, National Archives of Philadelphia, and the Balch Institute gave staff development presentations and demonstrations on the use of the materials in the classroom. Small groups of students examined the sources throughout the year for assignments and for pleasure. Library lessons were also developed around primary sources.

Impact

Initially students were overwhelmed by the language differences of the resources as compared with contemporary vocabulary. Gradually, they learned to successfully investigate, gather, and utilize the rich information presented in primary and other historical resources. A file containing suggested research assignments to utilize the primary sources was developed for and made available to students in the library. To further expand the program and involve more teachers, a staff trip to the National Archives of Philadelphia was planned for the following year. The project also generated further activities involving the students' own personal artifacts. A contemporary oral history archive was considered for the future at Bodine.

Consultants
Cynthia Little, Pennsylvania Historical Society; Shawn Aubitz,
National Archives — Philadelphia Branch; Joseph Anderson,
Balch Institute for Ethnic Studies)

Phyllis H. Polen
Shawmont Elementary School
Grade 4/1988-89
Social Studies
\$300

The Amish Culture: A Traditional Lifestyle in the Modern World is an excellent example of a teacher turning a personal interest into a valuable educational experience for students. Phyllis Polen had long been interested in the oft-misunderstood Amish people who live so close geographically yet so far away in many respects. She wanted to give her fourth grade students a better understanding and appreciation of the life style of the Amish who have, by and large, resisted the encroachments of modern civilization. Ms. Polen observed a continual student interest in the Amish culture and strived to dispel stereotypes surrounding all facets of Amish life.

Students researched the history and customs of the Amish and created a display of a model Amish community, including a schoolhouse, covered bridge, cemetery, barn, crops, animals, and people. After researching Amish life, the children used creative writing techniques to make booklets which were submitted to Shawmont's writing project sponsored by PATHS. This study culminated in a two day trip to Lancaster County where the children visited The Amish Homestead and Mill Bridge Village.

Impact

The project provided a rich theme through which all areas of the *Standardized Curriculum* were successfully interwoven. The students gained a greater insight into a lifestyle offering a strong contrast to their own. Compositions, photographs, and slides were collected and yielded a permanent archive of the experience. Ms. Polen developed plans to expand this program to involve other ethnic groups and to increase her focus on multi-cultural education.

The Amish Culture: A Traditional Lifestyle in the Modern World

Multi-Cultural, Parent-Teacher-Child Experiences

Andrea Rosen, Delores Kramer, Helen P. (Peggy) Perlmutter
James Russell Lowell School
Grade K/1991-92
Social Studies
\$3,000

Getting parents involved early in their child's education — a worthy though challenging aim — was the goal of *Multi-Cultural, Parent-Teacher-Child Experiences* at the J. R. Lowell School.

Initially, the directors faced to primary challenges to implementing this project. The first challenge was the fact that Lowell was and is one of the most culturally and linguistically diverse schools in the city and also one of the most crowded. The second challenge was that the kindergarten was housed in a church basement some two blocks from the main school. But at Lowell, students, parents and teachers were up to these challenges. The project directors developed home instruction kits to help parents assist their children in academic activities. The kits contained directions in the language spoken by the families in their own home. Home kits contained both math and reading activities developed to enhance concepts covered in classroom activities. Math kits included manipulative materials such as Unifix Cubes, pattern blocks, and Cuisenaire Rods.

A collection of children's literature and translation materials purchased with grant funds assisted parents in reading books to their children. Activities such as creating leaf rubbings and assisting in meal preparation linked classroom and home learning experiences. The kits provided parents with structured activities and strategies to complement their children's school experiences.

Other activities encouraging parent involvement included a trip to Merrymead Farm and the preparation of the classroom Thanksgiving feast. Actors from the University of the Arts gave dramatic performances based on children's literature. Parents and children attended a performance of Hansel and Gretel at the Shubert Theater.

Impact

Project activities gave parents with a limited proficiency in English an opportunity to extend classroom learning activities into their homes. Kits provide access to learning materials used within the classroom to both children and their parents. Children increased their at-home reading through the book-borrowing portion of the project.

The Roaring Twenties

Watson T. Comly Elementary School
Grades 4-6/1987-88
Social Studies
\$3,000

The Roaring Twenties exemplifies how a teacher could build from a summer institute experience (in this case, a 1985 PATHS program led by Temple University history professor Morris Vogel), a successful Grants for Teachers and Schools project. This specific project enabled Judith Filipkowski to use her own acquisition of historical information as the basis of a year-long project introducing the life of the 1920's to Comly students through history, music, art, dance, and architecture.

The project began with Dr. Vogel presenting a general overview of the era, using toys from the Atwater Kent Museum to explain transportation, World War I, ethnic slurs, radio and film. He also explained how historians learn about the past from newspapers, magazines, scrapbooks, pictures and artifacts. Subsequent presentations by consultants included discussions of the filming of historical events, 20's personalities, sports, and architecture and learning how to do oral histories. Students then interviewed community members who were born before 1920. The interviews were audiotaped and transcribed. The students learned about the art and music of the 1920's from speakers Dorothy Magen and Don Kawash. Students also traveled to The Pennsylvania Academy of Fine Arts, Atwater Kent Museum, and The Historical Society of Pennsylvania. Journals were kept by the students for each event. A culminating activity was "The Roaring Twenties," a student and faculty assembly which featured songs, dance and costumes of the era.

Impact

Most of the presentations were videotaped or audiotaped to be used in future years. The students' written and illustrated works were displayed throughout the school. A teacher's guide featuring research, activities, speakers, and bibliography was produced by the Project Director. The culminating performance was attended by many students, staff, parents, and community members. A partnership was formed with the Foundation for Architecture along with relationships with local senior citizens.

Collaborators

Anne Brown, Irv Reisman, Brenda Nelson-Brown, Lila Grossman

Consultants

Morris Vogel, Norm Kaner, and William Cutler, Temple University; John Alвити, Atwater Kent Museum; Dorothy Hagan; Don Kawash; Cynthia Little, Historical Society of Pennsylvania; Foundation for Architecture

Cultures Around Us

Terri R. Tyler and Carol Gaudiosi
John Barry Elementary School
Grade 4/1989-90
Social Studies
\$2,500

"What kind of resources are hiding in your school?" The answer at the John Barry School, where the *Cultures Around Us* project took place, points out that when it comes to designing a new project, this question is definitely worth asking. The project was designed to enhance students' knowledge of various cultures represented in Philadelphia. Special emphasis was placed on Jewish, Korean, Vietnamese, Cambodian, Native American, and African American cultures.

The project was initially influenced by experienced gained through a 1988 PATHS workshop. Among the "hidden resources" adding to the success of the project were: a colleague who had experience teaching on an Indian Reservation; a teacher whose daughter had participated in "Operation Understanding" (a program which takes high school students to Africa and Israel); and a principal who happened to know how to make African masks from papier-mâché.

Activities focused on migration and settlement patterns, economic and social structures, and culture and politics. Students investigated the historical contributions of groups through research projects, readings, and media sources. Writing activities included writing letters to new pen pals, producing newsletters, and documenting classroom and field trip experiences. A trip to an Indian Reservation, related the studies to Native American groups. In other activities, staff members and guests were invited to share their personal experiences of migration and settlement. Philadelphia area high school student participants in Operation Understanding conducted oral presentations about their experiences. Project consultants made presentations of stories, puppetry, dance and musical workshops.

Impact

Activities developed during the project expanded and enhanced the standardized social studies curriculum. The collaborative project also caused teachers to become aware of resources and skills available within their own school. Furthermore, materials such as student writing, videos, books, and other resources compiled during project activities were submitted to the library as a future resource for students and teachers.

Collaborators

Eloise Overby, James Barksdale, Harry Sheffer

Consultants

Hola Kumba Ya, members of Operation Understanding

Ilene Winikur
Edwin H. Fidler Elementary School
Grade 6/1993-94
Social Studies
\$2,500

This project was designed to build on the Project Director's past successes using thematic units about Native American cultures to engage students in interdisciplinary learning activities. Based on these earlier experiences, project collaborators developed activities to study three ancient civilizations of Central America: the Mayan, Aztec and Incan cultures. Special attention was devoted to the influence of geography in the development of these cultures. Project activities explored the religious beliefs, customs, ceremonies, architecture, daily life, and the impact of European exploration on these civilizations. Students designed individual research projects based on experiences in group discussions and projects, visits to museums, and guest lectures.

Students read historical fiction such as the novel *The Feathered Serpent* and *The Captive*. They kept daily journals on their various experiences, and teachers made writing portfolios with examples of student work created during the year. Trips to view ancient artifacts at the University and Civic Center Museums inspired activities emphasizing artistic, ceremonial and musical traditions. Students integrated mathematical and artistic concepts learned in project activities by constructing a Mayan pyramid model. They also developed Mayan calendars and prints and wrote books relating to their various experiences with the three civilizations.

The "Second Voyage of the Mimi" video series was also used to teach about science in the Mayan culture. The Mimi sailing vessel visited Philadelphia and students spent an entire day learning about sea travel from one of the video's actors.

Impact

Although the original project was designed to investigate three ancient civilizations, the use of the "Mimi" video series made the study of Mayan culture especially rich. A Mini-Fest hosted by the Delaware Valley Mimi Users Group permitted the children to extend their classroom activities with special events at Penn's Landing. The teachers incorporated the project's activities into the sixth grade curriculum, and purchased this science related video series and other computer software with grant funds.

Collaborators

Myrtle Cromartie, Iris Blum, Patricia Weiss, Marthena Scollon

Consultants

University Museum of Archeology and Anthropology; Jack Briggs, Delaware Valley Mimi Users Group

The Growth and Development of the Mayan, Aztec, and Incan Civilizations

Inventions & African American Inventors

Marjorie Blumenthal and Debra Barca
John B. Kelly & Benjamin Franklin Elementary Schools
Grades 2 & 4/1993-94
Thematic
\$2,500

While some grants were centered in one classroom or one school, a number of projects involved students and staff at two or even more schools. One example of a two-school project was *Innovations & African American Inventors*. This educational initiative was developed through the collaborative efforts of two teachers at the J.B. Kelly and Benjamin Franklin Schools. The project developed activities involving second grade students in researching and developing machines and inventions using Lego Logo Materials. Inventions created by African Americans were researched by fourth grade students. Their findings were published in reports created using *AppleWorks*. Both groups of students designed and constructed simple machines and inventions using Lego Logo programs and materials.

Additional activities developed during the project involved students in identifying gears, levels, and pulleys. Prior to these construction activities, students conducted research on African American inventions. Students researched the contributions of inventors such as Alexander Miles, creator of the elevator; Issac Johnson, inventor of the bicycle frame; and Sara Goode, inventor of the cabinet bed. Reports concerning the various inventors and inventions were recorded in student publications created through computer desktop publishing programs.

Within each school, children sketched and worked in cooperative groups to design their simple machines and inventions using computer programs. These cooperative activities allowed students to create larger inventions including forklifts, pedal-operated trash can lids, and beach chairs. The integration of research activities on inventions and inventors provided students with historical resources for ideas to design their own creations.

Impact

Students involved in this collaborative project designed, constructed, and demonstrated inventions and simple machines using the computer program Lego Logo Tech. Student publications concerning African American inventors were produced through research activities and the use of word processing programs. Activities developed within the project were planned to be implemented in an additional grade in each school the following year.

Judy Buchanan, Rhoda Kanevsky
Samuel Powel Elementary School
Grades K-6/1984-85
Thematic
\$7,143

Literature of Different Cultures

Literature of Different Cultures was developed to help students at Powel elementary explore the themes of birth and death, power and conflict, relationships and feelings, survival and the rhythms of nature. The Project Directors engaged students in an in-depth study of folktales, legends, and myths from Greece, Sub-Saharan Africa, and China. A broader goal was to give the children a deeper understanding and appreciation of other cultures.

Though the school IMC was the focal point of the project, each classroom had its own library center with books, tapes, and records from the three cultures. Students read books from the center on their own, in reading groups, and as a class. Books were also borrowed on special loan from The Free Library of Philadelphia. As students progressed through the project, they noted common themes of morals, heroes, and explanation throughout the cultures. Several classes also traveled to the Philadelphia Museum of Art, Civic Center Museum, and the University Museum to further their cultural knowledge. Art activities extended from these trips and involved African carving, Chinese silk painting, and Greek tapestries. Visitors from Africa, China, and Greece addressed Powel classes about modern life.

Impact

The students' increased knowledge of the cultures was apparent. For example, they began to act out "Medusa" or "Theseus" rather than TV show characters during recess. Younger children also expressed excitement when they saw that their older siblings were reading the same stories. In addition to the students' activities, the staff members collaborated on professional development. They worked in groups of three to research each culture. The entire staff worked together the following year to continue the project, which was expanded to include the Native American culture.

Collaborators

Donna Erickson, Isis Harris, Katie Zimring, June Merritt, Gary Travis, Cheryl Raffauf, Sabra Cameron, Liz Izenour

Consultants

Jim Bell, Robin's Books; Lois Brady, Civic Center Museum; Kim Lasko, Free Library of Philadelphia; University Museum of Archeology and Anthropology; Philadelphia Museum of Art

Afro- American Experiences 1587-1987

Sabra Cameron
Samuel Powel Elementary School
Grades K-6/1986-87
Thematic
\$3,000

Though all grant projects have classroom applications, a number of successful projects have been directed by non-classroom teachers. *Afro-American Experiences - 1587-1987* at the Powel School was one of many projects centered in the library, involving collaboration between classroom teachers and the librarian. The primary goal of the project was to help children explore the African American past and present through a range of demonstrations and experiential learning opportunities. A secondary goal was to make history more relevant to the students by engaging them in concrete experiences with the past. The project was an extension of a previous PATHS/PRISM grant on the literature of different cultures.

Students took field trips to various museums to learn about African art, music, geography and animals. Presentations took a wide variety of forms from assembly programs for the whole school to a series of lessons to a single class. A wide range of topics and presentations supported the students' studies.

Throughout the year, students worked on two independent research projects. The first focused on a theme of folk tales, countries, or history; the second, on an African American theme.

Impact

The unit encompassed much more than was originally planned; for example, one class constructed a world map noting the countries of ancestral origin of students in the classroom. The library collection of books and audio-visual aids was greatly expanded and updated. A bibliography of African myths, legends, folklore and history was created for the purpose of sharing with teachers across the city.

Collaborators

The entire Powel School staff collaborated on this project

Consultants

Alan Fiske, University of Pennsylvania; Essan Byll (former resident of Togo); Jean Woodley and Marjorie Seiger, Philadelphia Museum of Art; Diana Sidener, Folk Artists in the Schools; Charles Blockson, Temple University; Michael Simmons, American Friends Service Committee; Sherman Wooden, Baron Institute; International House; Philadelphia Theater Caravan; Georgia Sea Island Singers; Civic Center; Afro-American Historical and Cultural Museum; Franklin Institute; Philadelphia Zoo

Exploring the World of Newspapers

Ned Carroll
John B. Kelly Elementary School
Grades 3,4/1988-8
Thematic
\$1,225

Exploring the World of Newspapers was developed to utilize the newspaper — by studying its contents and its production — as a means to connect and explore all areas of the classroom curriculum.

Consultants Acel Moore, Lynne Berman, Bob Rosenthal, and Stuart Ditzen of *The Philadelphia Inquirer* gave advice on the workings of a newspaper and also took the students on a tour of the *Inquirer* plant. Copies of *The Inquirer* were supplied to students several times throughout the year. The students participated in a variety of activities in preparation for the publication of a class newspaper. They examined and created maps of local neighborhoods, produced "All About Me" books, created advertisements, and researched weather, food and moon phases as presented in the paper. The students learned how to identify the "who, what, where, when and why" of a newspaper article. The culminating activity was the publication of a class newspaper.

Impact

Mr. Carroll hosted a Newspaper in Education workshop for fellow teachers. Due to a change in his position, the project expanded well beyond the anticipated class. Several teachers expressed interest in using newspapers in their own classrooms. A list of activities for use with a newspaper was constructed by the Project Director and made available to other teachers. Videos and supplements on newspapers were to be used to implement the project in the following years.

Consultants

Acel Moore, Lynne Berman, Bob Rosenthal and Stuart Ditzen
Philadelphia Inquirer

The J.W. Howe School Goes to Asia

Herbert Davis
Julia Ward Howe Elementary School
Grades 1-5/1992-93
Thematic
\$2,000

Because Howe elementary has a significant student population with Asian heritage, the continent of Asia was selected as the thematic focus of this whole-school project. After identifying the Asian nations from which large numbers of Howe students had emigrated to the United States, activities were developed to examine variations in climate, geography, agriculture, art, religion, and customs between these countries.

Each grade focused on specific geographical areas or countries. First grade students examined housing patterns and folktales of Japan and Korea. Second graders studied styles of dress and textiles from Japan and Korea. Third graders and students enrolled in special education classes compared ceremonies, foods, and traditional art, music and fabric designs of China and Indonesian countries. Fourth grade participants compared the environments of Asia Minor, India and Pakistan with the United States. Fifth graders investigated historical transitions in immigration, scientific contributions, and medical research in the former Soviet Union, Iraq and Iran.

Trips to museums and cultural centers, and music and dance programs enhanced the students' classroom activities and investigations. A tour of the Korean Market and Korean Buddhist Center introduced students to Asian American community centers in Philadelphia. Children were also provided with elementary instruction in some Asian languages. Finally, students produced music and performed dances celebrating Asian culture during a school wide assembly.

Impact

Project activities increased student interest in and research on Asian cultures. Teachers developed ideas and strategies during the project's progression that increased their interest in using thematic units to instruct across subject areas. Grant funds also furnished the Howe School with a permanent collection of literature and videos on Asia.

Collaborators

Marva Rice, Gladys Murray

Consultants

Philadelphia Visitors Center; Language Center of the School District of Philadelphia; Guest lecturers from the community: Mr. & Mrs. Subbari (Asia Minor), Arlene Hassler (China), Sara Ninon (India & Pakistan); Civic Center Museum; University Museum of Archeology and Anthropology; Chinese Cultural Center and Embassy; Balch Institute for Ethnic Studies; Albert Einstein Hospital

Trudy Dolgin
Alaine Locke Elementary School
Kindergarten/1987-88
Thematic
\$3,000

Both teachers and students received instruction during this extensive interdisciplinary project which used the theme of gardens to teach about plants, gardening, and nutrition, and to create lessons across the curriculum. Doris Stahl of the Pennsylvania Horticultural Society instructed the teachers in plant biology and garden management. Their students then began planting, transplanting, and rooting in flower pots, window boxes, terraria, window sill greenhouses, and an outdoor courtyard.

Year-long units were taught on horticulture and nutrition. Language development lessons involved puzzles, games, and classifications, while patterning activities centered around foods and plants. Dance, music, and stories often revolved around holidays and foods and flowers. Trips to food markets and nature centers also gave the children a new perspective on the garden theme. Students measured, weighed, counted, sorted, and sequenced, foods and seeds to develop math skills. The "Slim Goodbody" series of cassettes and filmstrips was used to teach good nutrition. Finally, "play food", "dress up" and puppets were made available in the dramatic play area for playing store, restaurant, dentist, and gardener.

Locke School provided \$500 in additional funding through its operating budget, and Project Success donated \$300 for equipment and demonstrations by Resource Teacher, Doris Murray.

Impact

The Locke School kindergarten acquired numerous books, utensils, appliances, and other lasting materials so that this nutrition and horticulture program could be replicated in the following years. The hands-on experiences helped students learn gardening techniques, food preparation, and the nutritional food groups. They also significantly increased their observation skills. Plants grown by the students were used for Mother's Day, Father's Day and staff retirement presents.

Collaborators

Mary Lewis, Robin Cooper

Consultants

Doris Murray, Project Success; Doris Stahl, The Pennsylvania Horticultural Society

From the Garden to the Table: A Kindergarten Program for Gardening & Nutrition

Nursery Rhymes: Cultural Literacy in the Kindergarten

Donna Erickson
Samuel Powel Elementary School
Kindergarten/1988-89
Thematic
\$300

Through this project at Powel elementary school, teachers used nursery rhymes to generate multidisciplinary activities as well as to support the students' progress as emergent writers and readers.

To begin the project, each nursery rhyme was written in large print on chart paper and read, both in unison and independently. The students received a "Rhymes to Read" folder and mini-books, which included copies of each nursery rhyme studied, so that they could "read" their rhymes at home.

The nursery rhymes were easily applicable to curriculum extensions. Several of the nursery rhymes focused on foods (pumpkin pie and curds and whey) which were cooked in the classroom and were used to supplement math and science lessons. Number rhymes were helpful for counting practice, and many of the rhymes were used in arts lessons involving music, art, or dramatics. Common songs and finger plays were taught to the children. The students also had the opportunity to act out nursery rhymes using flannel board characters. Story boards (puzzle-like cardboard illustrations) were used to teach the kindergartners nursery rhyme sequences. Two upper grade students visited the classroom daily to read rhymes and listen to the children's recitations.

Impact

The kindergarten library was enlarged to include many versions of nursery rhymes. Ms. Erickson found that using easy, predictable texts provided students with books they could "read" themselves. The children began to think of themselves as readers and were eager to learn more rhymes. The multiple extensions into other curriculum areas created meaningful contexts for language skills. Children were audiotaped reciting rhymes that were then replayed to the class. Expanding the use of rhymes beyond Mother Goose to include other cultures was planned for future activities.

Jennifer L. Fedorchak
Woodrow Wilson Middle School
Grade 7/1989-90
Thematic
\$1,981

Write Women Back into History

Write Women Back into History was designed as a project to elaborate on the School District's *Standardized Curriculum* by introducing students to the contributions women have made in the arts, history, and sciences. This project was linked to a school-wide celebration of Women's History Month at the Wilson Middle School.

Project activities focused on literary works highlighting women's career development, the influence of women in historical periods, and the significant contributions of minority women writers. Readings included biographical and autobiographical works of black women, novels, and historical fiction. Images of women depicted in magazines were used to demonstrate contemporary gender bias in popular media. Through grant activities, students conducted interviews and produced oral histories of women within the community. Biographical sketches of black women were written and disseminated to the student body via morning announcements. A booklet containing examples of female images in advertisement was also produced to represent stereotypical roles of women present in popular literature.

Throughout the project, the art specialists and the librarian collaborated in introducing students to seminal contributions of women in the areas of literature, art, and science. The school librarian conducted a lecture series on selections of women's literature. Others created display boards featuring the contributions of women. The culminating activity of the grant was a school-wide assembly on women's contributions in historical and contemporary periods.

Impact

The *Write Women Back into History* project led to the development of sample lesson plans, suggested topics for research, video cassettes on women's history projects, and a Women's History Month program. Grant activities fostered the usage of literary works by women, particularly minority women, within the Wilson School. The project attracted the attention of the National Women's History Project, based in California, whose members were interested in the activities conducted to complement the celebration of Women's History Month.

Shakespeare/ Renaissance Faire

MaryAnn Fortuna, Barbara Rachubinski
George C. Thomas Middle School
Grades 5-8/1990-91
Thematic
\$2,178

Based upon the Project Directors' in a PATHS/PRISM Shakespeare Festival Colloquia, teachers at the Thomas middle school involved the entire school community in a year-long study of Shakespeare and Renaissance England.

Project consultants from agencies such as the Walnut Street Players and Institute of the Arts conducted workshops on dramatic performance. Reading plays, studying Renaissance music, fashion, cooking, costume making, and comparing past and present city environments engaged students in the study of the Renaissance. Art activities included the production of festival costumes and shields, and students produced a map of Shakespeare's England. Activities such as dramatic and dance performances, play writing, scenery design, and instrumental music performances prepared the students for comprehensive performances in a *Shakespeare/Renaissance Faire*.

The project culminated in a full day Faire which included presentations and workshops, both indoors and out, designed and presented by teachers and students. *Shakespeare/Renaissance Faire* activities also included interaction with an alchemist, tumbling routines, traveling minstrel performances, storytelling, jousting-in-the-gym, and a living chess game in the school yard.

Impact

The project engendered an increased knowledge of historical and contemporary literary works, public speaking, musical and dramatic skills and a greater interconnection between literature and other subject areas. Project Directors MaryAnn Fortuna and Barbara Rachubinski developed a troupe of performing students who traveled to nearby elementary schools to provide mini-performances and story telling. Students and teachers gained confidence in participating in creative performances. Mini-performances and the culminating Faire provided a vehicle to disseminate activities and resources among teachers, schools, parents, and the community, and allowed the students to demonstrate what they had learned during the unit of study.

Collaborators

Phyllis Kravitz, Anthony Priole

Consultants

Cynthia Murray-Holmes, Jacobi Jenkins-King, Cheryl Tavares, Lydia Wright, Mark Matthews, Cyrus Young, Joseph Gorman, Omegene Mumford, Robert Pennington, Marcia Witlin

Bridging Grade 4 with Dinosaurs

Harriet Gabriel Hurwitz
John Webster Elementary School
Grade 4/1990-91
Thematic
\$1,595

Since dinosaurs offer a particular fascination to elementary age students, teachers at the Webster elementary school embarked on the theme of "dinosaurs" as a to link studies in mathematics, science, language arts, and social studies.

To begin the project, a variety of resources, including a trip to the Academy of Natural Sciences, films, videos and books provided students and teachers with information on dinosaurs. The directors then developed activities to help the children research the location of dinosaur remains and comprehend environmental changes since their extinction. In one activity, students constructed terrariums to learn about environmental conditions during the time of the dinosaurs. In a social studies activity students made a map plotting dinosaur remains in Pennsylvania and other parts of the United States. Students also identified various scientific careers relating to the study of dinosaurs. In math, students created a time line tracking the life span and extinction of various dinosaur species. The height, weight, and lengths of dinosaurs were compared by constructing bar graphs using standard and metric measurements. Finally, in reading and writing activities, the students produced *Dino-News*, a publication which included creative writing and non-fiction pieces.

The culminating project activity was the creation of a mural displaying historical, scientific, and artistic products developed by the children in their study of dinosaurs.

Impact

Students involved in the project created a database of dinosaur facts and figures to be used in subsequent years. Books and videos on the topic of dinosaurs were added to the library collection. Project Director Harriet Hurwitz felt the success of the project would lead to creation of new thematic units.

Collaborators

Robin Patterson, Marie Ford

Primary Nongraded Cluster

Mary N. Kane
John Webster Elementary School
Grades K-4/1993-94
Thematic
\$3,500

A pilot program designed to allow each student to learn at his or her own pace, the *Primary Nongraded Cluster* project used monthly themes as a focus for classroom activities. Whole language activities were conducted in the morning; during the afternoon, students participated in activities at various classroom centers. Additionally, students were provided with theme books each month which contained enrichment activities to be completed throughout the month. Classroom centers included activities focusing on language arts, math, listening, reading, science, social studies, cooking, music/movement and pretending.

Each center provided students with activities related to the monthly theme. For example during October, the theme was the harvest. Students read books and poems, and sang songs related to this seasonal topic. Art lessons engaged children in decorating pumpkins, and in mathematics activities, the students counted pumpkin and apple seeds collected after carving the fruit. Both students and teachers enjoyed foods such as pumpkin pancakes which they made in the cooking center. Other monthly themes covered in project activities included Native Americans, apples, whales, seeds, and dinosaurs.

Impact

By using the ten centers, students were provided with individualized learning activities. They also took part in cooperative learning activities with children of other ages and abilities. Students acted as peer mentors within classroom activities. The open-ended nature of center activities allowed children to proceed to a new task once they were finished in an area. This also allowed teachers time to offer students remedial instruction. Portfolio based and qualitative assessments of each child's educational progress was maintained by evaluating products created by the children in center activities. The project was ready for continuation the following year.

Collaborator
Janet Clerico

All That Jazz

Sheila E. Karmatz
Overbrook High School
Grade 11/1991-92
Thematic
\$600

What impact did African American artistic movements have on the development of music and literature of the 20th century? This thought provoking question served as the starting point of the thematic *All That Jazz* project for the eleventh grade students of Overbrook High School.

To answer this question, students first traced the history by documenting the relationship of these movements to current musical and literary works. The initial project was expanded by collaborating with participating students on a focus on black history.

Students were also involved in writing oral family histories, original folktales, and reaction papers responding to literary works. Students completed two research papers during the course of study: one focusing on the Harlem Renaissance and the second examining the Elizabethan Renaissance. These papers served as a way to incorporate the theme of black history into the traditional study of Shakespeare. Project activities led to the development of writing portfolios and journals. Selections from both of these sources were included in a student literary magazine.

The themes of African American music, oral history, and 20th century musical legacies were discussed in a series of lectures and workshops conducted by various community artists and historians on such topics as the musical and historic legacies of Jazz, Blues, BeBop, and Rap. Finally, students read literary selections from Maya Angelou, Alice Walker, James Baldwin, Richard Wright, and Zora Neale Hurston.

Impact

The original grant project was re-shaped to reflect student interest in reading additional works on Black History. Student interest in the project identified new areas to address in subsequent years. Suggested topics included African American poetry, women's and men's issues, and literary works by black authors.

Collaborators
Bob Martin, Anthony Maista, Melvina Quillen

Consultants
George Allen, Lovett Hines, Charlotte Blake Alston, Bob Perkins,
Donna Devore

His Infinite Variety - Shakespeare, Shops, and Elizabethan Life

Susan Lustbader
Mastbaum Area Vocational-Technical School
Grade 12/1988-89
Thematic
\$3,000

With the goal of expanding the standardized senior English course into a writing-across-the-curriculum unit for vocational subjects, *His Infinite Variety - Shakespeare, Shops, and Elizabethan Life* focused on building research skills by investigating the literary accomplishments and times of William Shakespeare.

The students read extensively about the Elizabethan periods as well as reading some of Shakespeare's works. Following this, the students worked on research papers and projects related to their vocational specialty. Students in specialties with no direct link to the time period conducted projects on other interests such as sports or medicine. Students presented their projects to the class and other school members. Architecture students created posters of scaled plans of the globe. Those studying clothing designed a full-sized Elizabethan dress and numerous doll-sized dresses. Cosmetology students styled mannequins, posters, and photos of Elizabethan hair styles and makeup. Construction and gardening pupils designed models of a manor and middle class house and a garden. Music majors played Elizabethan selections while drafting students designed plans for a dunking stool, stockades, and prisons. Other students constructed posters on Elizabethan sports, medicine, education, crime and punishment, family life, and exploration.

The culminating activity was an Elizabethan feast prepared by the food service students. They dressed in servant attire and served a six-course banquet to numerous visitors.

Impact

The project succeeded in integrating academic and vocational studies across disciplines. Moreover, the project served as an important staff development tool because of the camaraderie that developed among the faculty. Underclassmen were eager to participate in a Shakespearean festival in future years. The purchase of books and other materials paved the way for replication and expansion of the program. The gym teacher planned to teach about Elizabethan dance, the science teacher encouraged students to research medical advances and scientific development during the period, the voice teacher expressed interest in Elizabethan songs, and the sheet metal teacher developed a unit on armor. The project evolved to become a whole-school program.

Collaborators

John Palaitis, George Swales, Leonard DeFinis, MaryLucie Myles, Sidney Herman, Valerie Petranto, William Whittaker, Frederick Urofsky, Frederick Buonavolta, William Roth

Return to Roots

Kathleen Osorio, Runa Chatterjee
Mayer Sulzberger Middle School
Grades 6-8/1989-90
Thematic
\$3,000

Return to Roots was a whole-school project designed to help students and staff develop a deeper understanding and appreciation of African heritage. Teachers conducted weekly classes using enrichment activities in the areas of art, drama, music, literature, and poetry. Professional community artists conducted poetry readings and storytelling sessions, and performed traditional African music and dances.

Through project activities, students were immersed in reading and responding to African literature including folktales, fables, poetry, and plays. Student activities included story telling, script writing, dramatization, and the reading and recitation of poetry. Students collected information and resources on African history and culture from the Free Library as well as their own family members. They created maps, graphs, and charts to visually present the information on African geography, history, and culture.

African music and dance classes provided by the Philadelphia Dance Company supplemented curricular activities. Participants examined artifacts and art collections in a field trip to the Afro-American Historical and Cultural Museum. Consultants gave staff development sessions to assist teachers in incorporating African American themes, artifacts, and materials into classroom activities. Culminating activities included the publication of an anthology of student writing and art as well as an evening exhibition of student performances and projects.

Impact

The project involved the entire school population in its implementation. Teachers collaborated to develop lessons and activities to enhance curriculum studies. Creative presentations by artists introduced the children to community cultural resources. Literature focusing on African American themes was added to the library's permanent collection. The project's performances and artistic demonstrations increased community and parental involvement in school activities. This initial grant led to the development of a dissemination project that created a resource guide and suggestions to implement project activities.

Collaborators

Jerry Fluellen, Trudie Hastings, Shawn Jordan, Clennis Noble, Linda Saunders, Arthur Stevens, Sheila White

Consultants

Beryl Evans, Philadelphia Dance Company; Jeffery Johnson; Linda Goss; Thomas Snowdon; Yumy Odom-Robinson

A Bridge to Greater Understanding

Christine Perfecky
Henry A. Brown School
Grade K-5, ESOL/1991-92
Thematic
\$1,400

In an effort to integrate the growing numbers of Vietnamese parents and community resource people into school activities, the people and culture of Vietnam were selected as the theme for a literature-based, whole language approach to teaching language skills at Brown elementary school. A significant feature of the program centered on extensive staff development sessions and school-wide activities to acquaint faculty and students with cultural artifacts, traditions, food, dance, and celebrations of Vietnamese culture. Using a set of thematic books on Vietnamese culture, lessons focused on the geography, weather, clothing, crops, and folktales of Vietnam. Then using literary works on prejudice, separation of families, and war, students discussed and compared Vietnamese and American culture.

At the conclusion of the project, a Vietnamese New Year Festival performance featured the themes of ancestor worship and traditional music and dance. With the help of the bilingual counseling assistant, two Kensington High School students taught Vietnamese dances to the ESOL students. A parent agreed to sew traditional "ao dai" for the dancers. Other parents volunteered to cook traditional New Year dishes for the Tet banquet, and some gave dance practice sessions for students within their own homes.

Impact

Prior to the project, parent participation at Brown elementary had been difficult to establish. Yet, after unsuccessful attempts to obtain professional performers, parent volunteers assisted their children in developing musical and dance performances for the New Year celebration. Thus, project activities developed through this grant provided parents with an avenue for participating in their children's school experiences, and a stronger link between school and community developed through the project's activities and celebrations.

Collaborator
Linda Hargrow

A Shakespearean Garden

Richard Robinson
Abraham Lincoln High School
Grades 9-12/1985-86
Thematic
\$2,250

Combining the study of literature and horticulture served as the starting point for raising students' interest in humanities and in reading Shakespeare at Lincoln High School. The project linked the work of Lincoln's English Department with the horticultural and wood shops. The collaboration of these departments led to the development of a Shakespearean Garden and Renaissance Festival.

Students researched Shakespeare's references of flowers, plants, and trees, in order to determine the makeup of the Shakespearean Garden. Students in the wood shop and horticultural programs worked together to construct the stage and layout and plant the flowers and trees. Each plant was identified with a sign listing its common name, botanical name, and the quote and title of the book mentioning the plant. All classes read some of Shakespeare's works in preparation for the Renaissance Festival. Local elementary school students were invited to attend the festival. Student performers at the festival included soliloquy contest winners, drama club members, madrigal singers, and jugglers. The culmination of the project was the dedication of the Shakespearean Garden attended by students, staff, parents and community members and highlighted by a speech by Shakespeare scholar Dr. Joe Kramer.

Impact

The development of *A Shakespearean Garden* started a tradition of a yearly Renaissance Festival at Lincoln High School. Visiting elementary students wrote compositions about their experiences at the festival. A brochure describing the events was distributed to other schools, and an audio-visual presentation was created based on the plants in the garden.

Collaborators
David Kipphut

Consultants
Joe Kramer, Bryn Mawr College

African Culture Through Textile Painting

Hattie S. Stroman
Frederick Douglass Elementary School
Grade K-5/1990-91
Thematic
\$2,000

Through this project, the arts and culture of Africa came alive for students and staff of the Frederick Douglass School by examining the art of fabric painting. Students and teachers involved in project activities studied African geography, history, culture and literature. Throughout the program teachers and students learned about and applied printing techniques.

To support the implementation of the program, training in printing techniques and their use with students was provided for teachers. Classroom activities exploring African cultures and geography were coordinated with art classes involving printing African textile patterns. Kindergarten and first grade student read various African-inspired tales and created prints and illustrations using oranges, carrots, potatoes, and strings. Second and third grade classes read selections of African folk tales and created stencil and relief prints to illustrate story events. Fourth and fifth grade students participated in silk-screen printing activities to produce African motif on fabric.

Fourth and fifth grade students visited the Fabric Workshop to observe artists producing silk-screen handicrafts. This activity was developed to introduce students to the trade and craft of silk-screening. The culminating project activity was a display of prints and costumes during a school wide assembly on African culture.

Impact

The collaboration between teachers and specialists allowed teachers to share their expertise in various areas of African culture and art with their colleagues and students. The Project Director planned science and math activities for incorporation into the project for the following year.

The relationship established with the Fabric Workshop resulted in the donation of silk-screen frames and slides and Ms. Stroman was invited to attend teaching workshops at the facility. Two student interns employed by the Workshop volunteered to assist Douglass Elementary School students, the following year, in printing activities at the school.

Two students involved in the project activities received awards at exhibits sponsored by the Federal Reserve Bank and the Young Artists exhibit at the Philadelphia Civic Center.

Collaborators

Ruby Roper, Betsy W. Wice, Martin Clair

Consultant

Terry J. Heard, Fabric Workshop

Deborah Thomas-Greer
Bache/Martin Elementary School
Grades 6-8/1992-93
Thematic
\$2,500

The Philadelphia Between Two Rivers: Discovering, Testing, Sailing project created a "school without walls," by taking students to museums and to the banks of the rivers for academic activities. The Maritime Museum supplied educational activities and equipment to assist students in exploring the history of sailing and other forms of water transportation. The school's adopter, The Academy of Natural Sciences, offered free classes that introduced students to topics such as seashore life and environmental factors influencing Philadelphia ecology. Students, parents, and teachers also participated in tours of the Waterworks in Fairmount Park.

Various project activities facilitated historical study of the relationship between the city of Philadelphia and the Schuylkill and Delaware Rivers. A portion of grant funds was used to purchase a collection of literature on water, sailing and maritime studies. The students arranged an assembly and hosted a reception for Captain Bill Pinkney who, using a southern route, became the first African American to sail solo around the world.

Science experiments involved testing the rivers, local ponds, and streams for pollutants and organisms. Other science activities included the study of various sea and fresh water organisms such as reptiles, amphibians, and fish.

Philadelphia City Sail offered sailing classes to eighth grade project participants and instructed all middle school students in the physics of sailing. Weekly swimming and water safety instruction took place at William Penn High School. Many students advanced to receive deep water swimming certificates.

Impact

As a result of this project, Bache/Martin offers a maritime curriculum to attract six through eighth grade students from the entire district. Over twenty maritime works were contributed to the library collection. Philadelphia City Sail extended an invitation to students to attend free sailing classes along the Delaware River during the month of July. Notably, when students used their newly acquired skills to test school drinking water, they identified high levels of lead. New water coolers were immediately installed throughout the school.

Consultants

Academy of Natural Sciences, Philadelphia Maritime Museum, Philadelphia City Sail

Philadelphia Between Two Rivers: Discovering, Testing, Sailing

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