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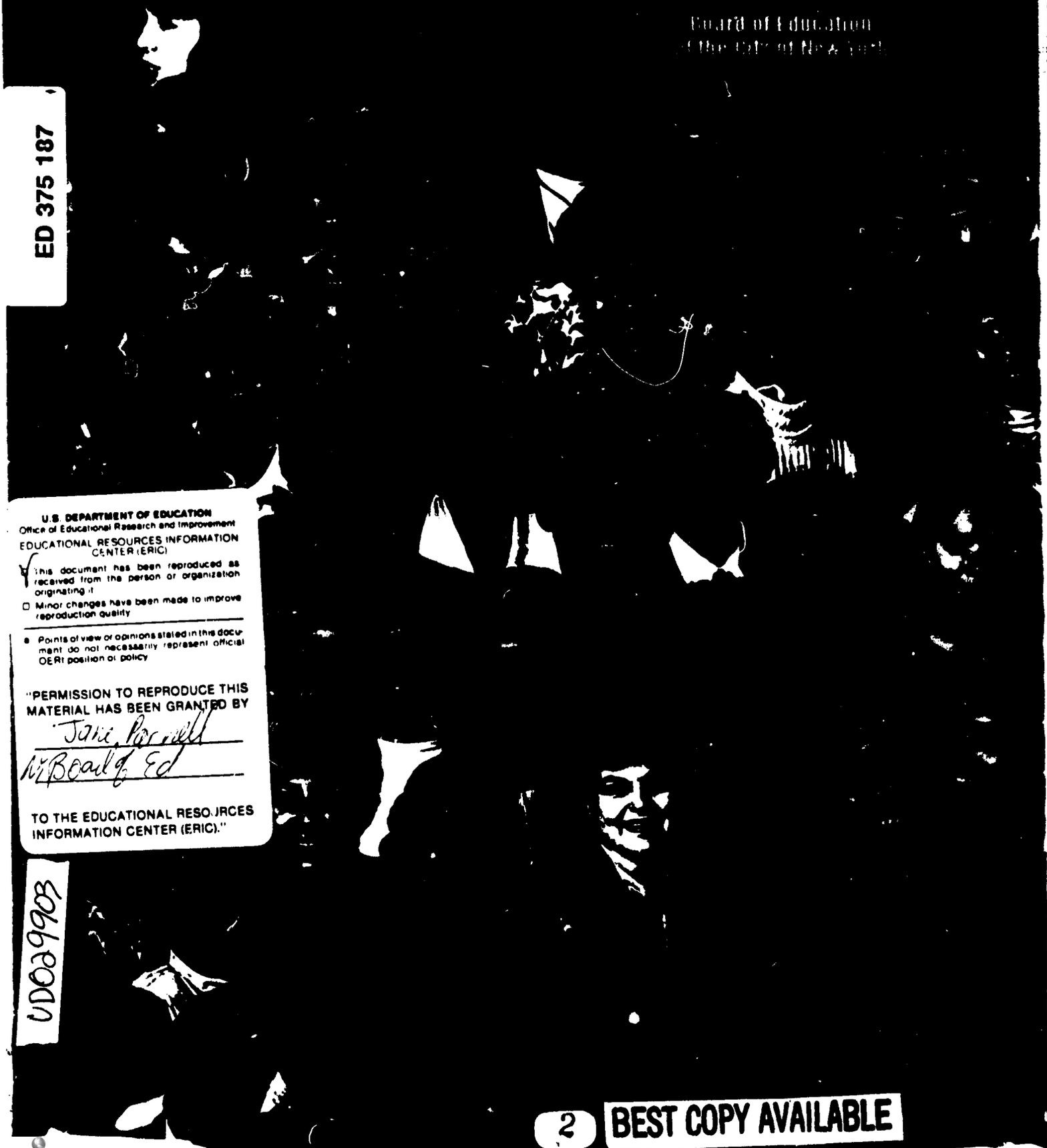
ABSTRACT

IMPACT II was created in 1979 to reward and recognize creative New York City public school teachers. Through its teacher-to-teacher network, successful projects are replicated. This catalog is a collection of profiles describing 52 exemplary projects. The profiles are organized by subject area and then divided by grade level into the following sections: (1) the arts; (2) communication arts; (3) computer science; (4) English as a Second Language; (5) health education; (6) grants from IBJ Inc. for global citizenship; (7) mathematics; (8) science; and (9) social studies. Each profile tells what the project does, who comprise the staff, what one needs for replication, how to adapt it, and why it works. A grant application is included for those interested in obtaining an adaptation grant. Projects are indexed by teacher, borough, school district, school level, and project title. (SLD)

WE THE TEACHERS

IMPACT II CATALOG OF TEACHER-DEVELOPED PROJECTS 1993-94

Board of Education
of the City of New York



WE THE TEACHERS

IMPACT II Catalog of Teacher-developed Projects 1993-94

Board of Education of the City of New York

IMPACT II Program

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Program Director

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Fund for New York City Public Education

This past year, with a grant from the Bodman Foundation and in cooperation with the Fund for New York City Public Education, IMPACT II awarded teachers 26 grants for exemplary math and science projects. This collaboration represents just one of the many successful ways we have increased our outreach to support and enhance teaching

IMPACT II, Inc.

Ellen Dempsey
President

Ellen Meyers
Director of Communications

Rafael Ortiz
Associate Director

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(212) 966-5582

IMPACT II is a unique, nationwide, educational, nonprofit organization that supports innovative teachers who exemplify professionalism, independence, and creativity within public school systems.

The IMPACT II model has been adopted by a confederation of local sites. Each site provides teachers with grant money for dissemination of their creative projects, "networks" these projects to interested teachers, and then awards grants to teachers who want to "take an idea and be creative."

Because it works, IMPACT II has been adopted by 25 sites including Houston, Texas, Chapel Hill, North Carolina; Washington, D.C.; the State of New Jersey, San Francisco, Los Angeles, and Santa Barbara County, California; the State of Illinois, Fairfax County, Virginia; the State of Connecticut; and Boston, Massachusetts. Rockland County and Westchester County have implemented a regional IMPACT II program.

Message from the Chancellor

Through IMPACT II, teachers around the nation benefit from learning about the classroom successes of other teachers. As they share ideas and replicate innovative practices, teachers help students experience pride in achievements and joy in learning. As a former member of IMPACT II's national board of directors, I have seen firsthand how interaction among creative teachers in IMPACT II projects fosters professional development and promotes student success.

IMPACT II offers teachers the opportunity to develop positive and rewarding mentoring relationships. A world of new ideas and opportunities to work with colleagues on exciting educational projects awaits all teachers who explore the resources of this national network.

In this era of educational reform, there are many efforts focused on school change. IMPACT II teachers are proving they can make a difference where it counts—in the classroom. I applaud the IMPACT II award recipients for creating and disseminating innovative projects and I encourage you to do the same—take an idea and be creative!

Ramon C. Cortines
Chancellor

Acknowledgments

We the Teachers, IMPACT II Catalog of Teacher-Developed Projects, 1993-94 was prepared as a project of the Division of Instruction and Professional Development.

Jeanne Parnell, IMPACT II Program Director, provided overall supervision for the project. Donna Strand, Assistant Program Director, coordinated the project.

Grateful appreciation is extended to all of the teachers who submitted information for the program profiles that appear in this publication.

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7 Grace Perez
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28 Jewel James
32 Anna Ubell
41, 44 Gloria Correa

IMPACT II First Annual National Teachers Summit

IMPACT II—The Teachers Network, in cooperation with the Dade Public Education Fund, Dade County Public Schools, and the United Teachers of Dade invited educators committed to creating the future of education to attend the first National Teachers Summit.

The summit brought teachers together from IMPACT II sites across the country.

Highlights included:

- honoring creative teachers
- presenting discussions led by teachers who are helping to create new schools, restructure existing schools, and initiate districtwide and statewide reform efforts
- informing educators of successful projects and disseminating teacher-developed materials

The summit offered participants the opportunity to form a vision of change as they learned exciting ways to redesign schools.

Participating educators from New York City public schools

Anita Britvan
Zina Burton
Marilyn Dixon
Barbara Ellis
Judith Engel
David Gonzalez
Peggy Godfrey
Ellen Goldstein
June Gray Fletcher
Mark Gura
Larry Held
Mary Johnson
Margot Jones
Roses Katz
Clara Kodah
Elliot Kornsand
Wai-Tong Lau
Anandi Macolm
Meryl Meisler
Phyllis Murray
Jeanne Parnell
Rose Reissman
Stan Rosengart
Terry Rosengart
Dina Schlesinger
Valerie Scott
Carol Seltzer
Marilyn Siegel
Mary Stevens
Patricia Suarez Weiss
Dorothy Suecoff
Donna Turian
Peggy Wyns

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Introduction

IMPACT II was created in 1979 to reward and recognize creative New York City public school teachers. Through its teacher-to-teacher network, successful projects are replicated. With the publication of *We the Teachers, IMPACT II Catalog of Teacher-developed Projects, 1993-94*, teachers throughout the city are invited to "take an idea and be creative!"

HOW TO USE THE CATALOG

This catalog is a collection of profiles describing 52 exemplary projects. The profiles are organized by subject area, then divided by grade level. However, adaptation often takes place across grade levels. You are encouraged to contact the teachers who developed the projects directly for more information. Assistance is also available from the IMPACT II office.

IMPACT II SERVICES

Adaptor Grants. If you are interested in adapting one of the projects described in this catalog, you are eligible to apply for an individual adaptor grant of $200. See centerfold for adaptor grant application. The application closing period is April 15, 1994.

If you received an IMPACT II grant in 1992-93, you are welcome to informally adapt a project listed in this catalog, but you are not eligible to apply for a grant this cycle. Some teachers adapt projects without applying for grants.

Interschool Visits. If you are interested in getting a firsthand look at a project, or in inviting a disseminator-teacher to your school to help you get started on adapting a project, IMPACT II staff can arrange for an interschool visit. This service is available for formal or informal adaptations.

Workshops. Disseminator-teachers present workshops throughout the school year. The IMPACT II staff will coordinate workshops upon request.

The IMPACT II Star* is a newsletter that keeps teachers informed about IMPACT II activities. It provides information about projects and news about the teachers involved in the network. Contact the IMPACT II office for a complimentary copy.

FOR FURTHER INFORMATION

For further information please feel free to contact: IMPACT II, Division of Instruction and Professional Development, Board of Education of the City of New York, 100 Trinity Place, Suite 900, New York, NY 10006, (212) 374-1451, Fax (212) 374-1475.

The Arts

Ikebana for Early Childhood

MORE INFORMATION
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HOW IT WORKS

Ikebana for Early Childhood is an interdisciplinary curriculum that combines the Japanese art of flower arranging with the scientific study of flowers. Students work on weekly projects using fresh flowers in the classroom flower arranging center. They read books about flowers and Ikebana, learn about tools and materials needed, and engage in cooperative flower-arranging projects. Students' questions and observations about flowers stimulate class discussions; these lead to lessons conducted by the science teacher on the structure, growth, and classification of flowers. The topics of garden bugs and pest control are also introduced and studied. With their increased knowledge and new vocabulary, students write about their research findings and flower-arranging experiences. They illustrate their classwork with flowers. Older children study poems about flowers and kindergarten children produce spring flower books that include photographs of flowers in bloom and sequential drawings of a flowering plant. Special projects include creating dried flower arrangements for holiday gifts and building a flower garden in the classroom sand table.

WHO THE STAFF IS

Project disseminator Celine R. Federici had always wanted to share her appreciation and love of flowers with her students. She developed this project for students at PS 6 in Manhattan in 1988.

WHAT YOU NEED

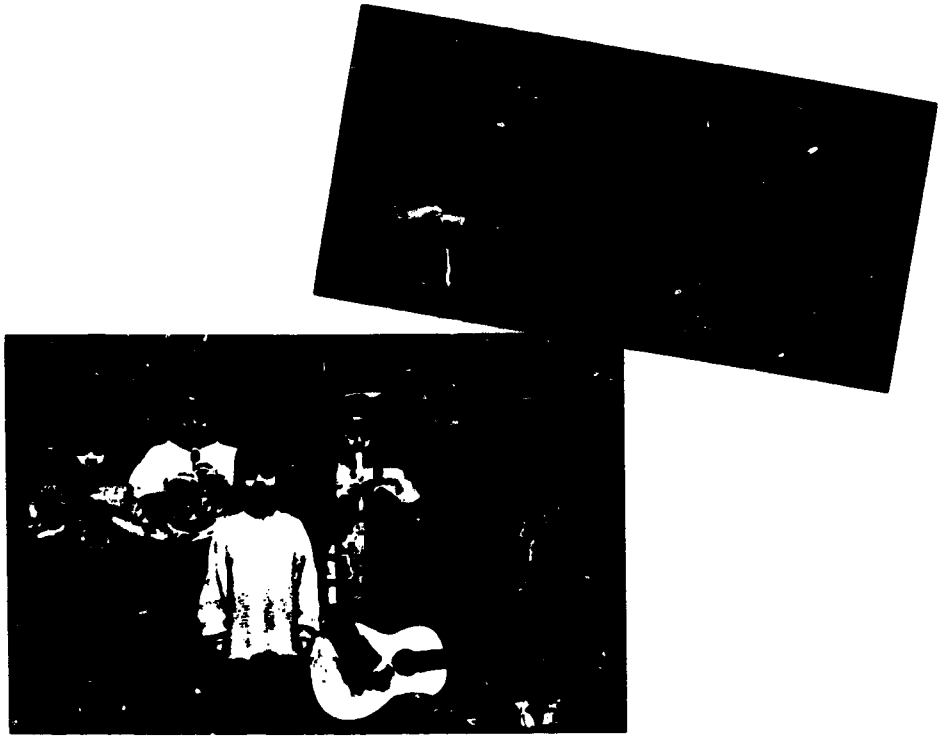
Community resources used in this project include local florists, art galleries, museums, and the Central Park Conservancy. Materials required include: fresh and dried flowers; moss (fresh and Spanish); bowls, vases, and special Ikebana containers (frog/oasis); clippers; rocks and shells. For the flower garden in the sand table: soil and rocks (100lbs. of each), seedlings, grow lights, and trowels. Resource books on Ikebana are helpful, as are art and science resource materials. A camera and film as well as arts and crafts and writing materials are needed for the spring flower book and for art and writing actitivies.

ADAPTATION TIPS

Science teachers, art teachers, and other staff members may participate in the project by conducting lessons and activities that tie into the theme. The participation of parents greatly enriches the project and should be encouraged. Upon request, interested educators may visit Celine Federici's classroom to observe flower arranging and other activities.

WHY IT WORKS

The children become excited about working with their friends on flower arrangements. They take pride in knowing the names of the different flowers and finished arrangements and in demonstrating their knowledge to other children and the adults in their lives. Parents offer enthusiastic feedback about their children's newly acquired interest, knowledge, and appreciation of flowers. Disseminator Celine Federici says, "The process and products of this project have a beneficial effect not only on the children, but on everyone who sees the children arranging or sees their arrangements."



Opera for Kids

HOW IT WORKS

Opera for Kids combines a group of young musicians with young actors and actresses in the writing and preparation of an operatic production. Using the experiences of the Russian student population, students of many different backgrounds work together to create an opera about the arrival of a Russian family to America. Teacher-supervised, student-led committees are formed early in the school year to develop an appropriate story and script and to develop the musical score. Russian children compare their impressions of America with life in Russia. The script is developed collaboratively by English-proficient and Russian students. Through cooperative learning, both groups improve their reading and writing skills. Students learn the rudiments of music and how to play a variety of musical instruments. Mathematical concepts are reinforced as students study, create, and prepare the musical component of the production. Geometric shapes are explored as the choreography develops. The theme of this Russian opera naturally lends itself to social studies as the history and hardships of the Russian immigrants are related through the personal experiences of the immigrant students.

WHO THE STAFF IS

An avid musician who plays several instruments and has a strong affinity for theater, John T. Iacometta motivates students through the performing arts. He is a teacher at PS 205 in Brooklyn.

WHAT YOU NEED

Items for set and costume production include fabric and sewing materials, foam rubber and adhesives, styrofoam, an airbrush, and paint. Participants will also need various musical instruments, including recorders and percussion instruments, as well as instructional booklets. Music and writing paper are also needed.

ADAPTATION TIPS

A teacher with a musical background or who is interested in music and theater can successfully adapt this project at various levels. An orchestra can be formed using simple instruments such as recorders and percussion instruments, or an orchestral chorus can be formed that provides vocal harmonization and narrative. Opera themes may include historical events, folktales, or an aspect of a particular culture or nationality. A moral message should be evident in the theme. For example, a school might choose the theme of Chinese New Year or a story involving the drumming connection among African villages.

WHY IT WORKS

This project incorporates a wide range of curriculum areas while also enabling teachers, students, and community members to experience art and music in their most expressive form, notes Iacometta. "Students are naturally motivated by music and theater. They enjoy participating in theatrical productions they themselves develop and produce," he explains. "In an atmosphere in which children are working toward a common goal, differences are minimized while similarities are maximized. They begin to perceive racism and stereotypes as 'childish' and 'silly,' a by-product of ignorance and pride."

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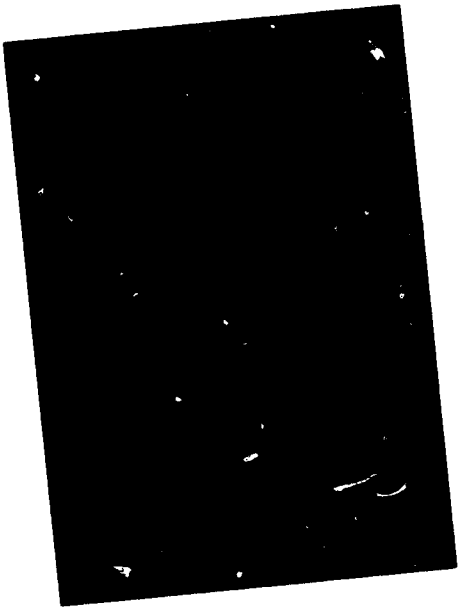
From Ikat to Uzbekistan: Folkloric Fiber Art



HOW IT WORKS

Over the course of ***From Ikat to Uzbekistan: Folkloric Fiber Art,*** students learn that many cultures incorporate fiber arts into items used in everyday life and for special occasions. These arts activities stretch children's notions of what constitutes a work of art. Students begin by studying Guatemalan carpets that appear "like magic" for processions on the eve of Holy Friday and then dissappear as the procession passes over them. They view photos of the carpets and hear recordings of music played at the festivities. Students then go on to explore fiber arts in many forms: kimonos used in traditional Japanese dance, costumes worn by native American Kachina dancers, button blankets worn by the Haida at Pacific northwest potlaches, and the traditional American patchwork quilt.

Students create origami kimonos; collaborate on a patchwork quilt project that includes yarn, mosaics, and self portraits; and create a cut paper version of a fiber art carpet, an alfombra. Through these activities, students learn about line, color, shape, texture, and space. They develop an awareness of these formal elements of art while learning about societies and cultures around the world. Through school residencies and visits to cultural institutions children view traditional and folk dances from different cultures. Not only do they see the dances and hear the music, they also study the colors and designs of the costumes. Students then compare and constrast how various cultures make use of symbols and design in fiber art. Student work is exhibited at a school fair and at local community businesses and organizations.

WHO THE STAFF IS

Nancy Wallach, a teacher at PS 164 in Flushing, began this project in 1992 in an effort to integrate the traditional arts of non-Western cultures into her arts projects.

WHAT YOU NEED

Materials needed for the project include glue, scissors, multicultural markers or paints, fadeless construction paper, wallpaper or other decorative paper, ribbons, felt, buttons, posters, slides, art books, and samples of fiber art.

WHY IT WORKS

The project gives students with varied backgrounds, including special education students, opportunities to experience success and to take pride in their work, says Wallach. "One class recently visited a gallery in Soho to view an installation in which the artist used doll's clothing in several symbolic configurations," she recounts. "What they learned in this project made this challenging work of art accessible to the children. They were able to discuss and understand the social and formal content, as well as to appreciate the humor of this artwork. The curator remarked on the group's ability to concentrate on a follow-up activity."

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Insight Into Islamic Culture

HOW IT WORKS

Insight into Islamic Culture uses an arts-based approach to teach students about Islamic culture and its expression and influence in the world around them. Arts activities incorporate study in other disciplines as students learn about the geographical diversity of the Islamic world, the techniques of Islamic art, the similarities between the Islamic faith and other religions, and the role that communication has in the unification and survival of the culture.

Students begin their exploration by viewing slide images of paintings, calligraphy, carpets and other textiles, and architectural designs and decorations. Field trips are made to the Metropolitan Museum of Art's Islamic Spain exhibit and to the Islamic Cultural Center. Back in the classroom, students use their newly acquired knowledge to create wall murals of geometric designs and decorative collages.

All subject areas are represented in their cultural studies. Students study geometric shapes and tesselations (mosaics). They study the geography and trade of Islamic regions, read Islamic literature, learn about bookmaking, try their hands at calligraphy, and write their own adventure tales and arabesque poetry about shapes and colors.

WHO THE STAFF IS

Since November of 1992 Marie Arnold, a sixth grade teacher in Manhattan, has been introducing students to the study of Islamic culture.

WHAT YOU NEED

Basic materials include a slide projector, slides of representative examples of Islamic art, calligraphy pens and paper, fabrics, glue, scissors, markers, paints, mural paper, art books, and other resource materials on the history and cultures of Islamic regions.

ADAPTATION TIPS

The project can be tailored according to the grade level and individual needs of students. For example, in the lower grades students may enjoy fantasy stories and designing their own magic carpets. Upper elementary grades can learn the art of bookmaking and create colorful illustrations. Upon request, the project disseminator will visit interested educators to demonstrate the project.

WHY IT WORKS

The project offers children the opportunity to observe the world around them from a fresh cultural perspective, says Arnold. "I knew that the children were developing an interest in Islamic culture when they began to bring in examples of Islamic-influenced art. They are able to identify Islamic influences in buildings and other structures right in their own neighborhoods—for example, bench ironwork and door grilles."

MORE INFORMATION

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Communication Arts

Passport to Literature

HOW IT WORKS

Presenting literature from many cultures, ***Passport to Literature*** engages children in reading and writing activities as they learn to appreciate the similarities and differences among ethnic groups. The project emphasizes multicultural themes and so helps children to understand and cope with racism and bigotry and to explore possibilities for personal and social change. Reading genres including folktales, novels, drama, poetry, and oral histories enable children to "meet" people from different backgrounds and to learn about themselves in the process.

Children keep a journal on their readings and share their thoughts and learnings in small-group and class discussions, letters, and experience charts. Along with reading and writing activities, children work on arts and crafts projects chosen by the group or the individual child. Filmstrips, videos, interviews, trips, songs, and an ethnic food festival enrich the experience. Reflecting an integrated reading approach, *Passport to Literature* enables children to learn about the customs, culture, geography, and other aspects of the ethnic groups studied as they develop oral and writing skills.

WHO THE STAFF IS

Steven Schneider is a reading specialist at PS 85 and currently works with at-risk children in a co-teaching classroom environment. He has been teaching the project since 1991 and has presented it to the New York State Reading Association. He strongly believes in literature's potential to promote multicultural education.

WHAT YOU NEED

Basic materials include multiple copies of the same titles for individual or group use and materials for writing and arts and crafts projects. Teachers may enrich the project through other media, such as filmstrips, videos, and music, or through special events such as a food fair. Trips to museums and visiting speakers may also be included in the project.

ADAPTATION TIPS

In addition to communication arts, teachers can use multicultural literature to explore other curriculum areas, including science, the arts, mathematics, and social studies. For example, by focusing on math, teachers can discuss money, measurement, and graphing as extentions of multicultural themes. A guidebook, a bibliography, lesson plans, and student work samples are available to teachers interested in the project. Telephone conferences and visits can also be arranged.

WHY IT WORKS

Passport to Literature motivates students by using interesting literature in small-group activities in which children get much-needed individual attention. The children enjoy the special activities such as publishing a newsletter, planning a food festival, and cooperative arts and crafts projects. "As a result of their experience, they are better able to work independently and in groups and have a better attitude toward learning, toward themselves, and toward each other," notes Schneider.

MORE INFORMATION

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Math-FUN-Tastic Student-created Magazine

HOW IT WORKS

The ***Math-FUN-Tastic Student-created Magazine,*** a joint project of Hillside Middle School and Louis Armstrong Middle School, affords each student the satisfaction of producing math activities, games, puzzles, and articles to challenge themselves and their classmates. The purpose of this year-long project is to develop students' conceptual and critical-thinking skills, to encourage them to express themselves creatively through the production of their own magazines, to foster positive interdependence and social skills, and to create a bond between students in two community school districts.

Students are introduced to *Dynamath* magazine early in the year; after solving *Dynamath* problems, they are asked to create similar problems to challenge each other. Manipulatives such as pattern blocks, tangrams, rainbow cubes, and dice are used to help make abstract concepts more concrete. As students become more experienced at adapting these problems, they create more original problems that become part of their portfolios. Students created Valentine's Day cards with math puzzles, which they sent to a local children's hospital. This helped prepare them for their final project and gave them personal joy from brightening the lives of others.

WHO THE STAFF IS

The *Math-FUN-Tastic* project was collaboratively developed by Deborah Silverberg, a math teacher at Hillside Middle School, and Rossana Perez, a math teacher at Louis Armstrong Middle School. They are excited by the project's potential to promote learning and self-confidence among students, and they are available to offer suggestions, demonstrations, and copies of students' work to teachers interested in initiating the project in their own schools.

WHAT YOU NEED

Materials include *Dynamath* magazine (published by Scholastic), 8 1/2" x 11" or 11" x 14" rexograph paper, magic markers and colored pencils, construction paper, and books containing worksheets of math puzzles, brain teasers, games, and biographies of famous mathematicians. Mathematics manipulatives are useful to help students conceptualize problems. A desktop publishing system to produce the magazines may be used if a more professional look is desired.

ADAPTATION TIPS

The project is flexible enough to be adapted to any grade, from primary through high school, and to a wide range of language and ability levels. Younger children can cut and paste or draw pictures that display their knowledge about number sense; high school students can display their knowledge and depth of understanding of more sophisticated mathematical concepts including geometry, trigonometry, and calculus. ESL students can be paired to produce a native language magazine and an English translation.

WHY IT WORKS

Math-FUN-Tastic allows students to take responsibility for their own learning in a fun, challenging, and rewarding way. Students take pride in their work and have even asked for more class time to share their challenges with each other. "Eighty percent of the students who had not been handing their homework in on time were on time for this project," note Silverberg and Perez. The students' work has been well written, informative, and well designed, they add

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(Interim Acting)

6th Grade Power Newsletter

MORE INFORMATION
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Principal Ernest Gisolfi

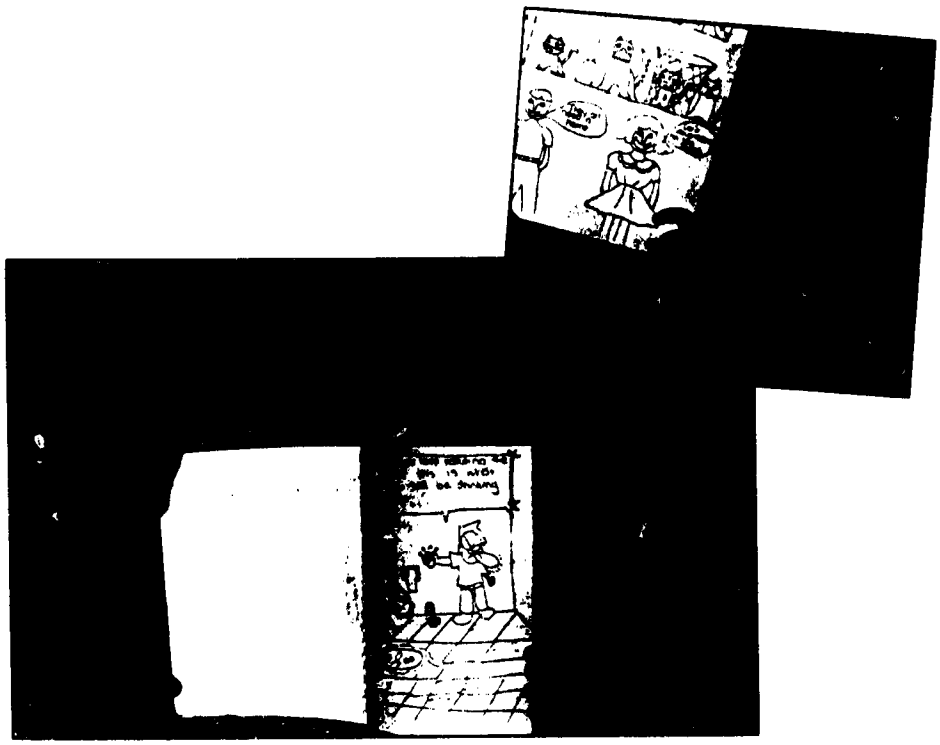
HOW IT WORKS
The ***6th Grade Power Newsletter*** was developed in response to students' desire to create a newsletter that reflects their interests and concerns. While its focus is on math and science, the newsletter covers many topics. Its purpose is to provide students with a vehicle through which they can express their ideas and recognize their contributions to the life of the school community; while school procedures and curricula are constantly dictated to them, here is one activity they are in control of. Students also benefit by learning the complexities of publishing, including research, writing, printing, and distribution.

WHO THE STAFF IS
Leondro Dellapina initiated *6th Grade Power* during the 1992-93 school year with the intention of motivating students and enhancing their self-esteem. In response to its widespread popularity among students, he plans to initiate seventh and eighth grade newsletters.

WHAT YOU NEED
Newsletter staff is currently at eleven (one president, two editors, seven reporters, and one artist). When the project is expanded to other grade levels, staffing will reach approximately twenty. Computers with a basic word processing project are essential. A camera is optional.

ADAPTATION TIPS
The project is easily adaptable in that it does not require extensive material resources; all that is needed are the motivation and talents of the students. Local vendors can be a part of this project. For example, retailers such as Toys R Us may place low-cost advertisements, providing the newspaper with income to operate and expand

WHY IT WORKS
Because it is produced by and for sixth graders, *6th Grade Power* gives students a sense of ownership and accomplishment in seeing the finished product of their efforts with their names standing out in the credits. "Requests for additional copies of the newsletter have been overwhelming," exclaims Dellapina. "The sixth graders *want* to be involved, and the seventh and eighth graders have asked to have their own newsletters," he says



HOW IT WORKS

Color Me Green is an environmental coloring book designed and published by sixth and seventh graders to use in teaching younger children about responsible environmental practices. Reflecting an empnasis on cooperative learning and community service, this project provides an opportunity for pre-teens and teenagers to be positive role models for younger children while taking pride in a job well done. Students are involved in all phases of production: through group process, they explore environmental topics to be illustrated, prepare the artwork, write captions, test sample pages with younger siblings, solicit bids for printing, and collate and bind the books. After completing the book, a committee of students accompanied by a teacher presents it to the principal of a local elementary school.

The class decided to use *Color Me Green* in two first grade classes and to include a brief writing excercise for the first graders. In preparation, the class engaged in discussion and role-playing about the behaviors and cognitive abilities of young children and how to handle a variety of situations that might arise. The project included maintaining a journal in which students logged their accomplishments, evaluated their work, and discussed their problems and successes. Students also submitted a final report, which was used to assess their learning and performance and provide future guidance to teachers.

WHO THE STAFF IS

Sara Jane Hardman and Laura Hussey initiated *Color Me Green* in 1992. By eliciting students' own ideas for a project to teach younger children, they were able to generate the initial enthusiasm that made it successful.

WHAT IS NEEDED

Students will need fine or medium black markers and blank white paper for drawing and reproduction. The greatest share of the costs is for reproduction and, if desired, a binding machine and plastic binders. This last item is not essential, since the book can be stapled together. It is important to establish a good relationship with the elementary school in which students will be working.

ADAPTATION TIPS

This project taps right into young people's idealism and commitment to the environment and offers opportunities for a variety of forums. Beyond *Color Me Green*, students could design books focusing on particular environmental and community problems (for example, *Improving My Neighborhood*). They can use their books to work with younger children in the same school or in other schools.

WHY IT WORKS

Community service benefits everyone and is an effective component of the middle school curriculum. The students developed a sense that what they were doing was important because of the service that they were providing to younger children. They produced an exemplary book and their journals reflected the pleasure and satisfaction that they derived from the project. One student wrote: "We all got along really well. We were talking, laughing, and reading together. We also have a wonderful coloring book, some photos to capture the moment, and thank-you letters from the little kids."

MORE INFORMATION

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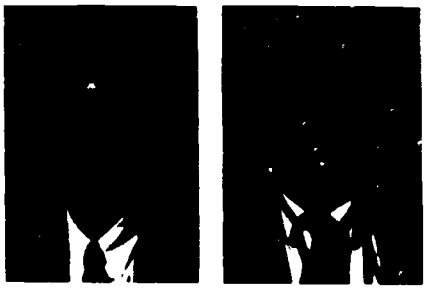
Why Can't We All Get Along? The ID House



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Principal John Lee

HOW IT WORKS

Why Can't We All Get Along? is both the title of this project and the focusing question developed collaboratively by the 33 students in the ID House. Through group discussion, the students decided that the question of what creates harmony and conflict in society was a provocative theme for the next term's study; they decided upon areas of inquiry in economics, sociology, psychology, history, geography, science and technology, literature, and law. The house members looked for connections among the disciplines as they researched questions in each area. As a term project, students built model houses, complete with wiring, working plumbing, a facsimile heating/cooling system, insulation, and landscaping. The premise for the project was that the lack of affordable, ecologically sound housing is a major barrier to social harmony, as is our lack of knowledge of how things work.

The ID House is the first House project formed by the school's Chapter I SBM/SDM team. ID has a double meaning: acknowledgment of the developing identity of the adolescent and the interdisciplinary nature of learning. The house concept has redefined the roles and responsibilities of teachers and students: teachers act as catalysts for the design, implementation, and assessment of class projects, but the collaborative model means that students take control of their own learning. The consistency and mutuality created through ID House is what makes such collaborative projects as *Why Can't We All Get Along?* rewarding for students and teachers alike.

WHO THE STAFF IS

Jason Blonstein, a science teacher, has been on the faculty of Lower East Side Prep since 1976; Thomas Cheng, an English teacher, has been at the school since 1974. The House project was initiated in 1991. Their intimate involvement with their students within a collaborative framework has been professionally rewarding for them and an inspiration to students.

WHAT YOU NEED

Materials for *Why Can't We All Get Along?* include blank books, art supplies, and access to computers, if possible. Additional materials for the final project include cardboard, rubber hosing, styrofoam, assorted packing, electrical wiring, small bulbs with sockets, plastic sheets, solar cells, seeds, and a heavy duty staple gun.

ADAPTATION TIPS

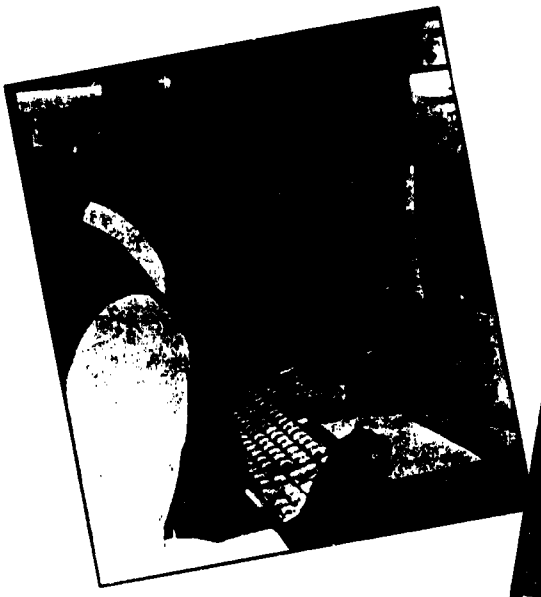
Why Can't We All Get Along? can be easily adapted as a theme of study but is best implemented in a collaborative setting. The collaborative process diminishes both the isolation of teachers and the fragmentation of students' learning. Instructional strategies, resource lists, student work samples, and other materials are available upon request. Workshops on the house model and on the project can be arranged at the school or at central locations. Interested teachers are welcome to visit anytime.

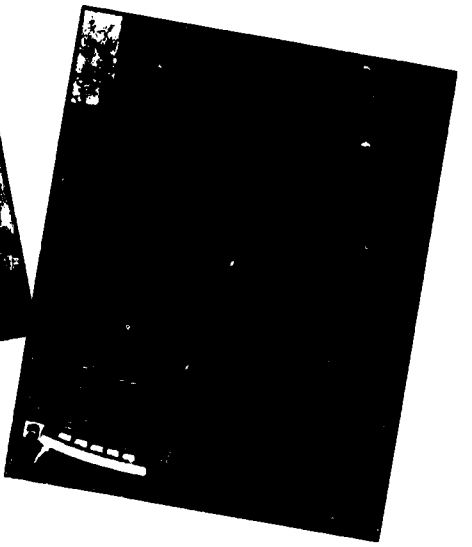
WHY IT WORKS

"We express our growth as improvements in habits of mind," say Blonstein and Cheng. "We have come to know our students very well and have observed improvements in attendance and achievement; our students have become more expressive, more secure, and more thoughtful than they were when they began. One student told us: 'Last year I didn't go to school, but now I'm glad I'm here. I never had teachers who wrote me back every time I wrote. I think I can learn here.'"

Computer Science

The Mayan Temple of Knowledge





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HOW IT WORKS

The Mayan Temple of Knowledge allows students to use various media and telecommunications to extend and share their knowledge of Mayan civilization in a game format. The project builds upon Second Voyage of the Mimi in an interdisciplinary approach to studying the Mayas.

Students were enrolled in NYCENET's Electronic Partners Project and paired with a sixth-grade class in Ohio. The class teams developed questions on the Mayas and categories such as Gods and Rituals (religion), Drawings and Architecture (art), and Life Before Columbus (social studies). Questions were exchanged via the Electronic Partners Board.

The object of the game is to build a temple in the opposing team's school. Each time a team answers a question correctly, the opposing team receives a "block" made of plaster, clay, stone, or jade, depending on the difficulty of the question, which they use to construct their temple. The winning team is given the honor of naming their temple. The class is divided into four committees: the game committee is responsible for determining the rules of the game and critiquing questions; the temple builders are in charge of designing a prototype of the temple, drawing pictures of events and items from the Mayan period, and building the temple out of construction paper; the research committee peruses Second Voyage materials, on-line and library encyclopedias, and books to verify and provide answers to questions posed by the opposing team; the photography committee takes pictures of the school, students, and staff.

WHO THE STAFF IS

Peggy Wyns received a 1992 New York Telephone Telecommunications Award for the *Mayan* project. She also developed the Pen Pals on Chips project, for which she received an Impact II disseminator grant, and has conducted numerous computer workshops.

Paula Goldstein, the Electronic Partners Coordinator, and Carol Seltzer, District 15 computer coordinator, provided invaluable support for the project.

WHAT YOU NEED

The Mayan Temple of Knowledge can be implemented by a classroom teacher or a computer science teacher. Second Voyage of the Mimi, a computer system with a modem, a phone line, and a NYCENET account are required. Arts materials for building the temple and creating drawings on Mayan themes and cameras with black and white or color film can be used. Ample texts and other reference resources should be accessible for students to conduct research.

ADAPTATION TIPS

Students may play the game without using Second Voyage of the Mimi. If the teacher does not have a modem or access to NYCENET, he or she can divide the class into two teams and conduct the game. *The Mayan Temple of Knowledge* need not be limited to the Mayas; teachers can replace the Mayas with another culture.

WHY IT WORKS

Students participating in the project had the opportunity to share their learning experiences with students who live in a different community. They showed excitement at receiving mail from their Ohio classmates, playing the game on the computer, and working on committees that allowed them to show their strengths. They were able to work creatively and to set their own goals and deadlines. "This year," says Wyns, "one of the fifth graders researched her family background and found out that she was a descendant of the Mayas. In addition, the students wanted more time to play the game on-line. This project motivates students to seek information for themselves and others."

Get with the Program!

HOW IT WORKS

Get with the Program! expands upon such computer programs as Oregon Trail, Carmen San Diego, and Expedition through a series of interdisciplinary lesson plans. Using Odell Lake software, students become involved in projects across the curriculum, such as making electronic books, making graphs, writing and designing newsletters, creating storyboards, and building an aquarium. Students work independently, applying word processing and spreadsheet programs, videos, overheads, the library media center, and other resources to complete each project. Students learn more sophisticated research techniques and to use technology as a tool. Teachers gain a creative way to use their computer and available software programs to their fullest potential.

WHO THE STAFF IS

Lourdes Santiago, a computer science teacher, taught the project during the 1992-1993 school year and intends to introduce it to junior high school students using the program Carmen San Diego.

WHAT YOU NEED

Computer software programs such as Odell Lake, Oregon Trail, Carmen San Diego, and Expedition are needed, though other programs may also be used. Students also enjoy using Hypercard. A writing program and art supplies are needed. Access to the library is a must; a library resource center in the classroom is helpful, as well as a video camera and an overhead projector.

ADAPTATION TIPS

This project is open-ended—it lends itself to a variety of teaching and learning styles. It leaves room for creativity and expansion and allows for the integration of a range of media and technology, depending on what is available and what students are interested in.

WHY IT WORKS

"Get with the Program! helped me to use programs that I had not used because, even though I felt they were interesting, after a while the kids got restless and wanted to go on to the next thing, " says Santiago. Now, she says, students are motivated because they can become experts in selected areas and they see the tangible rewards of their efforts. The use of art, building materials, and computers is exciting to them; they have also learned to share information, accept advice, and work cooperatively.

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English as a Second Language

We Are Authors

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HOW IT WORKS
"We study authors, we learn from authors, we grow to be authors". This is the theme of the ***We Are Authors*** project. In the reading center are shelves of books by Eric Carle, Norman Briwell, Arnold Lobel, and others. Since books are made of paper, the science center displays papers of all kinds and samples of recycled paper that the children made. In the math center are a variety of math word problems that children wrote to challenge their peers and paper money they can use to "order" books from book clubs. The social studies center explores the history of paper making, life before the invention of paper, and the invention of paper in China. The art center is full of paper crafts—paper foldings, paper cuttings, potato printing, and calligraphy. In the writing center are children's writing portfolios and a selection of letters to their pen pals. The language arts center contributes to the theme with punctuation and spelling tips, an editing check list, and a chart comparing aspects of the English and Chinese languages. But what is best loved is the *We Are Authors* center, where some fifty books beautifully made by the children are on display. The project concludes with a book fair in which parents, teachers, and children from other classes share students' pride as authors.

WHO THE STAFF IS
Project developer Jing Chen uses a whole-language approach to integrate various subject areas into the central theme. She has presented the project at several workshops and has participated in her district's professional development laboratory, in which her classroom was opened for teachers to observe the project in action.

WHAT YOU NEED
A variety of books for the reading center, bookmaking materials, and art supplies are the basic materials needed for the project. A paraprofessional may assist in activities in the learning centers. School and community libraries and your local bookstore are an invaluable resource.

ADAPTATION TIPS
Many teachers are excited about the philosophy of the whole-language approach, and this unit may serve as a blueprint for them to develop themes. Once they get a sense of this approach, they can create their own themes according to the needs of the class and the resources at hand.

WHY IT WORKS
The class continues to create new books; and Chatham Square Library has offered to exhibit them. The community art center at the Henry Street Settlement also asked that a workshop be given in the classroom. Both institutions have suggested that some of the books should be published. "Children enjoy what they are doing so much; very often they are so absorbed in their projects that they are disappointed to find that it is time to go home," says Chen.

Hatching How-to Handbooks

HOW IT WORKS

Hatching How-to Handbooks engages limited English proficient (LEP) students in creative activities that develop the four communication skills: listening, speaking, reading, and writing. While activity-based approaches in promoting language acquisition have been shown to be effective, many students are too self-conscious to participate fully in class activities. This project gets students so excited about what they are doing that they lose their self-consciousness. The project opens with a project that students enjoy, such as cooking pancakes, making pinatas, folding origami, or planting a garden. Vocabulary development, reading, and discussion familiarize students with concepts related to the activity.

Each stage of the activity is photographed. When they see photos of themselves doing activities, it is much easier for students to recall the activity and put it into words. Students create a book based on their project. They review the photos, place them in order, dictate and write text to go with them, and type their text on a computer. Once the book is assembled and completed, students read and reread them. After reading the book aloud, students read it to a class of first graders. Sharing their work with the younger children is exciting for students and helps raise their confidence and self-esteem. The books are enduring and important additions to the class library.

WHO THE STAFF IS

Kristina Zukauskas teaches ESL at the Bilingual, Bicultural Mini School in East Harlem. She has presented the project to several groups of educators and is available to work with teachers, individually or in groups, who would like to adapt it in their own schools.

WHAT YOU NEED

The basic materials needed for the progam depend on the activity in which the students are involved. Students used chart paper to dictate their sentences. Bookmaking supplies include paper, oaktag, glue, staples, or fasteners. Crayons or markers may be used to illustrate some books. A camera and film and a computer may be used.

ADAPTATION TIPS

Hatching How-to Handbooks is extremely flexible and can be adapted by ESL and other teachers. Almost any project can be turned into a how-to book; depending on the needs and creativity of the teacher, the project can be either limited or expansive. Several disciplines can be incorporated into a project. Photographs are a nice addition to books but are not absolutely necessary; students can illustrate activities. A computer may be used, or students can write their books by hand.

WHY IT WORKS

"I work with recent immigrants," says Zukauskas, "and the majority of them have a very limited English vocabulary. Although they are all capable of higher order thinking, their lack of English vocabulary sometimes inhibits their expression of thoughts. The projects we have done have helped them get over their initial shyness; even the most quiet, reticent students want to go to other classes to read them our books," she explains.

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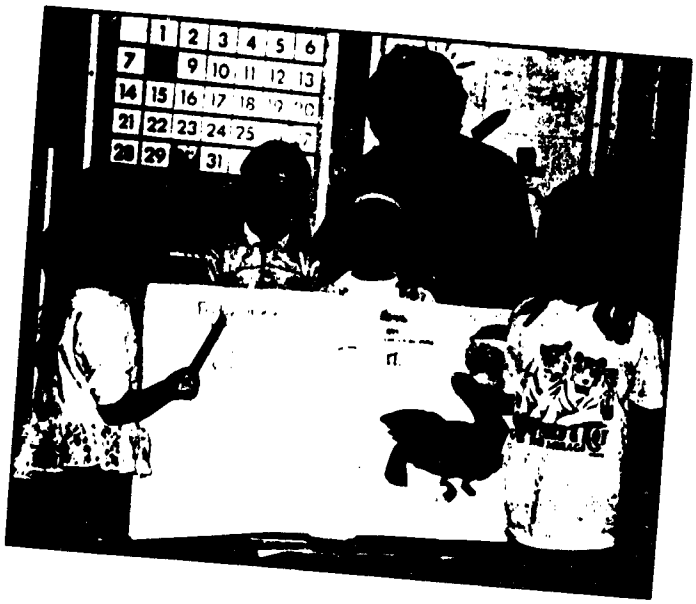


If It's Monday, It Must Be Multicultural Health Day

HOW IT WORKS

If It's Monday, It Must Be Multicultural Health Day is an interdisciplinary project that engages children in studying nutrition by exploring their culinary roots. The project adapts Eric Carle's book *Today Is Monday* to teach children about various foods and the countries from which they come, along with animals from around the world. The class begins by looking at the illustrations in the book and learning the song "Today Is Monday." Small groups of children are then given a piece of oaktag with a day of the week written on it and a picture of a food item alongside it. The class joins in a musical presentation in which each group stands up when the class sings about their day of the week and food item. When all groups are standing, the children are asked to place themselves in the right order for days of the week. For homework, children, with help from their parents, bring in a picture of food that is popular in their native country. The names of foods mentioned in the song are replaced by those that the children bring in. The children present their song to another class, and they engage in a variety of other multicultural activities; for example, they map the countries where different foods come from, make charts based on food groups, write stories, and learn to make "stained glass" animals like those in Carle's books. The project culminates in the creation of a big book that showcases children's understanding.

WHO THE STAFF IS

Iris Teitler, a teacher of grades K-2 at PS 200, initiated the project in 1993 to promote multicultural awareness in children while expanding their social and academic skills.

WHAT YOU NEED

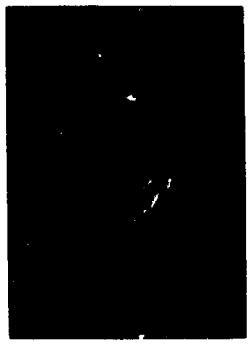
Materials for the project consist of *Today Is Monday*, by Eric Carle, and other multicultural books for the literacy center; a globe; materials for "stained glass" animals; and additional art supplies such as oaktag, construction paper, glue, markers, paints, pipe cleaners, sequins, and glitter.

ADAPTATION TIPS

Teachers seeking to integrate author and picture book study, whole language, and multicultural education methodologies will find this project easy to adapt. A variety of activities and projects based on the themes of food, animals, and areas of the world can be integrated into the project. Instructional strategies, lesson plans, student work samples, and other materials are available upon request.

WHY IT WORKS

The themes of food and animals are naturals for children. The class was enthusiastic about creating a multicultural version of "Today Is Monday" and presenting it to other classes. "They were excited about making their big book and took pride in their accomplishments," says Teitler. In the process, children gained skills and information across the curriculum: days of the week, mapping, categorizing, foods and food groups, names of animals, the differences and similarities among ethnic and national groups. Feedback from parents was positive.



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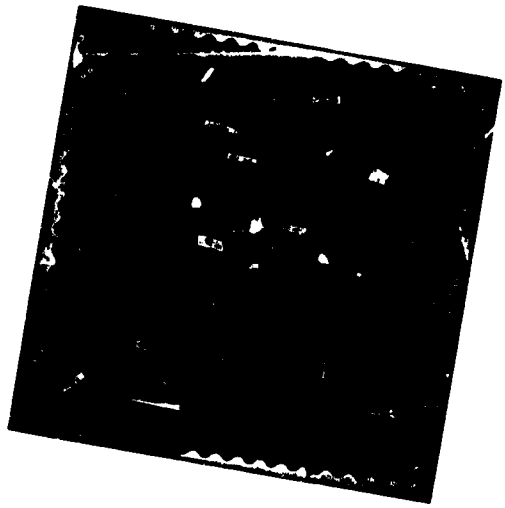
IBJ Teacher Grants in Global Citizenship

Dolls Around the World



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HOW IT WORKS

Dolls Around the World is an innovative approach to developing children's awareness of the traditions and customs of peoples from many regions of the world. The use of dolls to explore world cultures was initially linked with the third grade social studies curriculum Regions of the World. A unit on the Eastern Coastal Indians opens with a presentation by the teacher of Native American cornhusk dolls. The children read the Seneca story "The Doll with No Face" and make their own dolls.

The class makes Hopi Kachinas from clothespins, pioneer wooden spool dolls, Japanese paper dolls, beaded dolls to represent the Zulus, and soap sculptured Eskimo dolls. The project reaches across all curriculum areas. For example, children develop communication arts skills by reading folktales and writing their own stories about the dolls they make. They develop the math skills of patterning and measurement in lessons focusing on the beadwork of the Plains Indians and African peoples. Not only do they develop sensitivity toward the cultures of diverse peoples, but they gain a sense of pride and accomplishment in creating and displaying their work.

WHO THE STAFF IS

Loretta Nardone has been using dolls in her classroom for 18 years. She has found that their visual power and their familiarity to children make them appealing and effective learning tools. She is currently working on a *Dolls Around the World* curriculum guide and work kit for District 31. Consultations can be arranged with interested teachers.

WHAT YOU NEED

Dolls can be made from almost any materials on hand, including paper, clothespins, spools, craft sticks, and beads. Sewing may be incorporated into dollmaking activities if desired. For the wooden spool dolls and the cornhusk dolls, a local crafts shop provided materials at a discount.

ADAPTATION TIPS

Dolls Around the World allows both teachers and children opportunities to be creative. Almost any curriculum unit can incorporate dolls to introduce the history, traditions, religion, art, and environment of people from a specific region, nation, or ethnic group. Parental involvement can be most helpful; parents or senior citizens can be asked to help with dollmaking activities. A teacher might also involve older students in working with younger children.

WHY IT WORKS

The response to the project by children, teachers, and parents has been extremely positive. The dolls are on exhibit at the New Dorp Library and a full-page article about it appeared in the *Staten Island Advance*. Making dolls was equally exciting for the boys in the class as for the girls. "My best example of the project's success came when one of my boys made a doll for me dressed in native costume with an accompanying story," she recalls.

Grandparents Show Children the Mountaintops

HOW IT WORKS

The goal of ***Grandparents Show Children the Mountaintops*** is to give young children opportunities for positive interaction with elderly people, thereby dispelling negative attitudes and stereotypes about the aged and people with disabilities. Inviting grandparents and other elderly people into the classroom to talk about their lives and to interact with the children is both exciting and rewarding to all concerned. This activity arouses children's curiosity and pride in their own family histories. By discussing some of the physical impairments of old people, such loss of hearing, vision, and mobility, children learn about ways to help others and to appreciate the strengths and capabilities of elderly people.

The project incorporates all subject areas into the intergenerational theme: children read literature on grandparents and aging and write experience charts and stories about their grandparents. They take photos and draw pictures when visitors come to speak to the class and write letters thanking visitors for coming. Science activities include comparing the headphones in the listening center with hearing aids and comparing eyeglasses with magnifying glasses. The class also investigates the lifecycle of humans and animals. Mathematics activities include making graphs on the attributes of children, teenagers, younger adults, and elderly people.

WHO THE STAFF IS

Marylin Kurlan Sperling, an early childhood teacher, continues to develop new activities for the project. Her goal is to instill in children an awareness of the positive contributions of elderly and disabled people and to foster tolerance and understanding across the generations.

WHAT YOU NEED

The project involves a teacher, a paraprofessional, and parents and grandparents who are available to visit and to become involved in class activities. Materials needed include art materials, a tape recorder, a camera, chart tablets, and paper for writing letters. If there is a senior center nearby, teachers may want to invite volunteers to visit the class or have the children visit the center.

ADAPTATION TIPS

Grandparents Show Children the Mountain-tops can be adapted in whole or in part. Variations on activities based on intergenerational themes are up to teachers' imaginations and resources available in the school and in the community. Marylin Sperling is available for telephone or in-person consultation.

WHY IT WORKS

The grandparent-child relationship has great emotional power and is a source of pride in children. Classroom visits by grandparents and other elderly people create interest and excitement in children. The visitors communicate their joy in being there and the children respond in kind. "After I brought my mother to class," says Sperling, "one child, who was too shy to speak, went home and told her father that maybe her own grandma could come to class when she recovered from a stroke. The next day, she drew a picture of her grandmother. She also gave one of the visitors a big hug."

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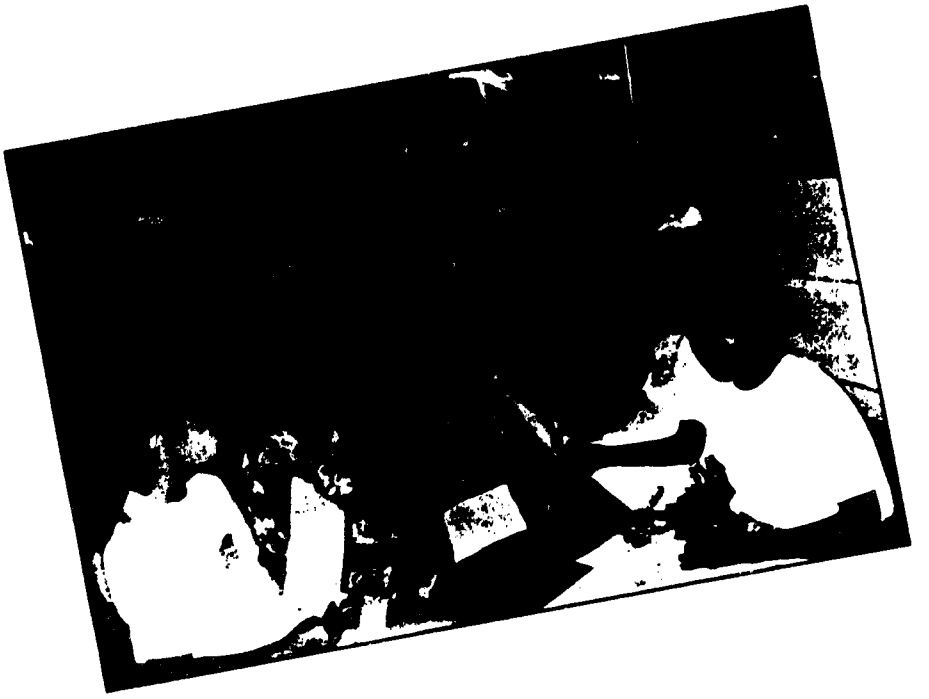
Tales for Tolerance



HOW IT WORKS

Tales for Tolerance engages 60 children from grades one and four in a peer mentoring project that focuses on the indigenous peoples of North and South America. The project uses folktales from various regions to aquaint children with the cultures of indigenous peoples; its goal is to dispel stereotypical ideas the children may have formed and to promote tolerance and understanding of other cultures. The project begins with a reading of "The Legend of Bluebonnet," by Tomie de Paola, to the fourth grade class. In cooperative groups, students create posters that portray parts of the story that they liked best. They are then exposed to other folktales of indigenous peoples and are asked to choose one they would like to share with a first grader.

Then, groups composed of two first graders and two fourth graders are formed. The groups meet for 30 minutes twice a week for three weeks. Besides reading and discussing their folktales, they read about the culture that their particular folktale is from. Once they are thoroughly immersed in their stories, each group retells their tale to the other students. They may choose a skit, puppet show, film strip, or another kind of presentation. While they learn about peoples from North and South America, children strengthen a variety of skills, including retelling, summarizing, formulating, and presenting. They also develop map reading skills as they locate the areas inhabited by the group they are studying and learn what that area is called today.

WHO THE STAFF IS

Karen Chikofsky first taught *Tales for Tolerance* during the 1992-1993 school year. She plans to include other cultural groups and involve grades two, three, five, and six in the project, culminating in a schoolwide festival.

WHAT YOU NEED

The staff members presently involved are a first grade teacher, a fourth grade teacher, and a paraprofessional, who oversee and guide the intergrade groups. Ten folktales of indigenous peoples are used along with books and other research materials on the various peoples concerned. Blank audiotapes, markers, posterboard, paper of various types and colors, glue, scissors, and other art materials are used for the culminating activity.

ADAPTATION TIPS

Tales for Tolerance lends itself to adaptation easily, as any ethnic or cultural group could be used as themes. Teachers may choose the cultural group to be studied and then select eight to ten folktales from that region.

WHY IT WORKS

Fourth graders are highly motivated by the opportunity to work with first graders and by the chance to work creatively and collaboratively on a culminating project. "My fourth graders continuously reported to me the improvement the first graders made in terms of listening skills and their ability to retell the folktale," says Chikofsky. Students have changed their stereotypical attitudes toward the cultures of indigenous groups, she says. Teachers involved find themselves working collaboratively and have students doing the same. In addition, the presentations made by each group have proved to be an excellent evaluative tool.

MORE INFORMATION

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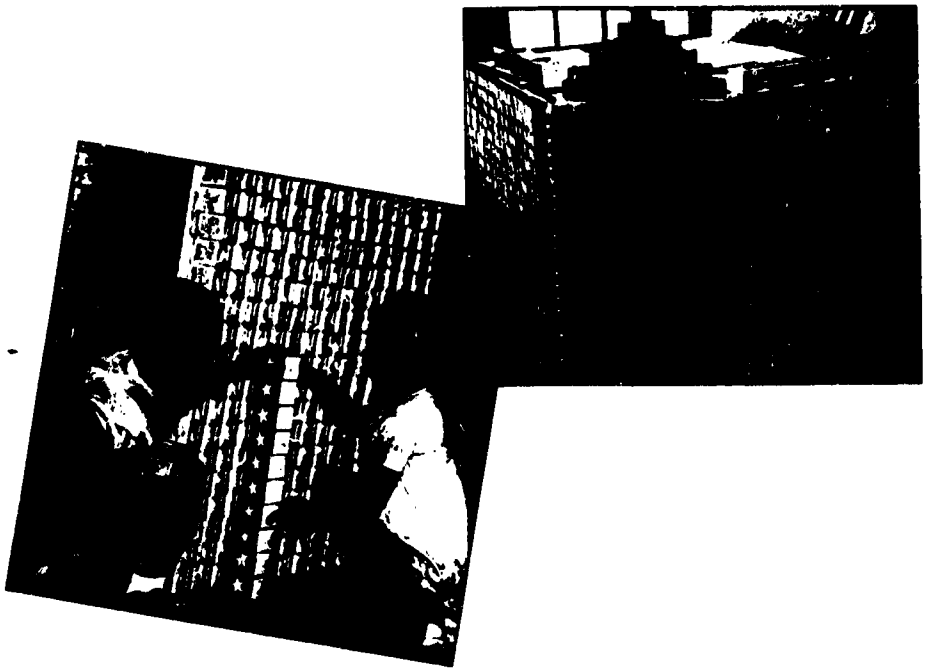

Children Are Architects of the Future

HOW IT WORKS

Children Are Architects of the Future is an integrated curriculum project that employs a thematic approach to develop academic skills and concepts of at-risk second grade students. Using the theme of architecture, the project builds on children's strengths and interests to motivate them to learn more about structures in their environment. The project begins with neighborhood walks in which children observe and categorize buildings in the neighborhood according to shape, size, use, building materials, age, and other features. The children gradually learn to discern geometrical shapes and architectural forms and are encouraged to reproduce these in the classroom through drawings, models, and paste-ups.

These exercises branch out into an array of activities. For a major class project, children design and build a "reading house" out of empty milk cartons. The children work cooperatively as designers, architects, construction workers, and clean-up crews. Students also create a skyline that encircles the classroom and a "structures dictionary" of words they have found that are related to architecture. They also work with a junior high school class on a variety of projects. Field trips and guest speakers enrich children's experience. The project incorporates mathematics, science, social studies, language arts, and art in varied and creative ways that spark children's imaginations and allow them to develop their individual talents at their own pace.

WHO THE STAFF IS

Noticing that many children in his classes had never traveled far from their own communities, Theodore Husted, an early childhood teacher, designed the project in 1992 to expose students to the world beyond their immediate neighborhood and to foster academic and social skills.

WHAT YOU NEED

The project has been a success largely because of the collaborative efforts of many educators and community organizations citywide; these include architects, engineers, and construction workers who visited the class and junior high students who served as mentors. Art and construction materials were provided by PS 46 and through donations. They include building materials such as empty milk cartons, wooden blocks, legos, Cuisinair rods, and sand, as well as paper, markers, rulers and drafting supplies, glue, and other items for building and designing structures.

ADAPTATION TIPS

To start this project, all you need to do is take a walk around the school neighborhood with the class to observe various buildings and structures. Children can discuss their observations and design and construct a simple model of the neighborhood using empty milk cartons and cereal boxes. Once children are engaged in observing and constructing structures in the environment, the project will take off; the theme has endless possibilities for activities and can build upon children's interests. Workshops and visits can be arranged with Theodore Husted for those interested in starting the project at their own schools.

WHY IT WORKS

Children Are Architects of the Future creates a nonstressful, individualized learning environment in which at-risk children can learn at their own pace. "I have witnessed growth in each and every child," says Husted. "They have demonstrated improvement in self-esteem, attendance, class participation, reading and math, and critical thinking. The project has provided opportunities for children to acquire higher order thinking skills such as analysis, synthesis, and evaluation," he notes.

MORE INFORMATION

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The People's Court of PS 156

MORE INFORMATION

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Principal: Maxine O'Conner

HOW IT WORKS

The People's Court of PS 156 is a fifth grade court designed to respond to increasing levels of violence in our communities by helping students resolve conflicts peacefully. The process begins in October when the entire fifth grade reads about the American legal system and makes a class trip to the courthouse. Then the fifth grade takes a teacher-made "Bar Exam" to determine who will sit on the court. The 15 students with the highest scores and the best teacher recommendations serve on the court. The teachers and volunteers working with the People's Court decide which two children will be the defense attorney and the prosecutor for the week. Those two children meet with the defendant and witnesses to prepare their cases. The other children on the court serve as jurors. They decide the defendant's innocence or guilt and recommend punishments. Participating in the court gives students a chance to improve oral, written, and critical thinking skills. They are required to listen, take notes on the facts of the case, identify cause and effect, make inferences, and draw conclusions based on the evidence. The project also teaches children about the Constitution and law.

WHO THE STAFF IS

Fifth grade teacher Evelyn Jackson developed this project along with teacher trainer Diana Karabaic. The project was first taught during the 1989-1990 school year and has since been adopted by other classroom teachers. A volunteer from the Retired Senior Citizen Volunteer Project comes weekly to serve as one of the judges. The PTA has been active in publicizing the project to the community. Maxine O'Connor, principal, and Sharon McLeod, assistant principal, have also provided assistance and support.

WHAT YOU NEED

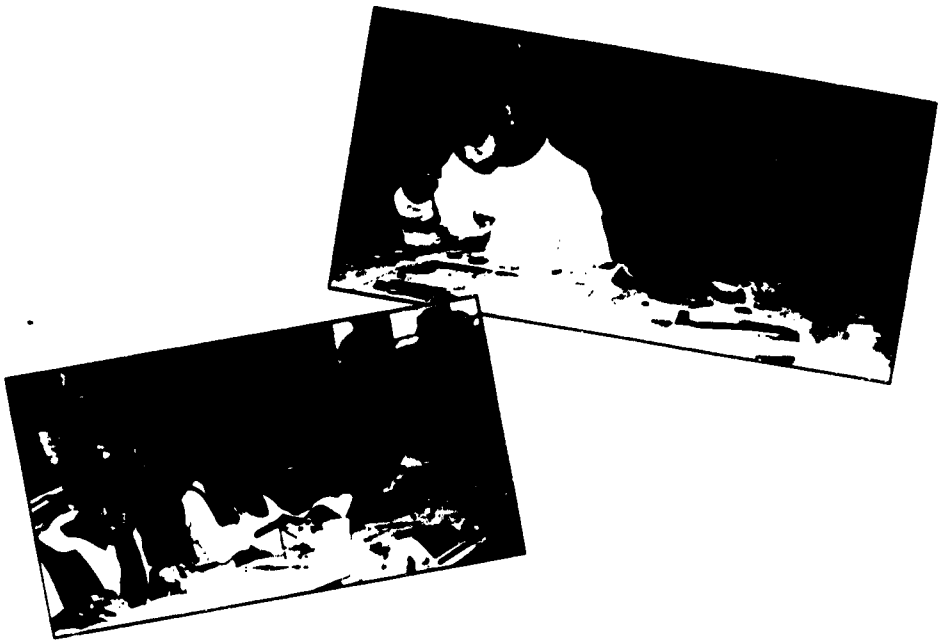
Aside from an administration and staff interested in using conflict resolution to solve children's disputes, this project depends on the involvement of two teachers. One teacher needs to be free for three periods a week. Two periods are required to set up the case of the week—deciding which incident to take, selecting the lawyers for the week, arranging for them to interview the defendant and the witnesses, and making sure the required participants will be available for the court session. It is helpful to have a second teacher available for the hour the court meets. PS 156 was lucky to have available to us the services of a wonderful volunteer from Retired Senior Volunteer Project (RSVP). If $200 is available to the project, shirts for the jury members, a gavel and refreshments while the jury deliberates are perks that improve the children's motivation.

ADAPTATION TIPS

PS 156 is not unique: the conflicts occurring there are common in many schools. A project such as *The People's Court* can be implemented schoolwide or in individual classrooms. Visits to the Supreme Court are very useful in introducing children to the criminal justice system. Teachers can contact the district attorney's office in their borough for information and assistance. Evelyn Jackson is available to consult interested teachers and to send information. Teachers can arrange to visit PS 156 to attend a court session.

WHY IT WORKS

Many children observe violent incidents outside of school; what they see influences their behavior and leads them to believe that there is no other way to resolve disputes. The project teaches them that there are alternatives. The 15 members of the court are seen by their peers as "winners." "Teachers are beginning to use the court process in their own classrooms," says Jackson. "Children in the hall see me and ask me to take a case. One child has become a role model to a student he defended. In other words, children are seeing *The People's Court* as a part of their world and as an alternative to violence. It works, and the children really need it."



Global Studies Across the Ages

HOW IT WORKS

Global Studies Across the Ages is designed to introduce children to a variety of cultures and to help them develop an understanding of peoples from historical periods and cultural backgrounds other than their own. The project focuses on ancient Egyptian, Puerto Rican, Mexican, and Native American cultures. The project is designed to accommodate learning disabled students ranging from 8 to 12 years of age who are functioning at kindergarten to third grade levels; because learning disabled students require hands-on experience to reinforce learnings, the project incorporates individual and small-group instruction as well as visual, auditory, and tactile activities. For example, students create materials for a game on Egyptian hieroglyphics as a follow-up to lessons on ancient Egypt. The project also includes trips to the Metropolitan Museum of Art and the Museum of the American Indian, as well as art projects and audiovisual events.

WHO THE STAFF IS

Vera Warlock-Banks and Linda Ferguson have been teaching the project since 1991. They are available to demonstrate to other teachers how to individualize the project to meet students' needs and can provide course outlines, instructional strategies, resource lists, and student work samples.

WHAT YOU NEED

Research materials for the project include *Native People of the Northeast Woodlands* and curriculum units on ancient Egypt, Mexico, and Puerto Rico. Art materials include clay, paint, brown paper for a mural, and construction paper; dry beans, poster board, and spray paint; and experience charts, notebooks, and worksheets. Additional materials include a tom tom, peace pipe, dolls, and other artifacts of the cultures studied.

ADAPTATION TIPS

Global Studies Across the Ages is designed to accommodate special education students who have been classified as learning disabled. Regular education teachers may want to adapt it to help meet the academic needs of slower students in the class. This can be done in many ways; for example, they may use tape recorders to tape information gathered during field trips. Teachers can then play the tapes and create individualized reading comprehension worksheets. Worksheets or cards may be color coded according to the difficulty of the skills.

WHY IT WORKS

Children are excited by the field trips and the numerous opportunities to make articles from other cultures. "They eagerly participate in all of the art projects and have asked to resume work on them from day to day," say Warlock-Banks and Ferguson. Through game playing and other activities, students have developed more tolerance of children from cultures other than their own. "We found that during the course of the project, conflict among the children decreased, and their reasoning abilities grew as they began to understand how people react in various situations."

MORE INFORMATION

Vera Warlock-Banks and
Linda Ferguson
PS 194, CSD 5
242 West 144th Street
New York, NY 10030
(212) 690-5954
Principal: Russel Cunningham

Getting on with Government

MORE INFORMATION
Donna Seidenstein
PS 209, CSD 21
Avenue Z and East 7th Street
Brooklyn, NY 11235
(718) 743-1954
Principal: Howard Leibowitz

HOW IT WORKS
In ***Getting on with Government,*** students run a true election campaign for president, vice president, secretary, and treasurer of the student government. They write and present campaign speeches, create campaign posters, and engage in schoolwide political events. The children vote by secret ballot, and elected members become part of the student government, the PS 209 Civics Club. The club serves as a liaison between the administration, staff, students, and the community and has an active role in school-based decisions. Students learn the principles and practice of democracy and apply these principles in governing classes; proposing policies; and planning, organizing, and running special events. Events planned by the civics club have included the PS 209 Carnival, which raised $2,800 for various charities; a schoolwide drive to collect money to aid victims of Hurricane Andrew; peer tutoring; and publishing a school newspaper. Students employ skills across the disciplines as they write articles for, design, and publish the school newspaper; make judgments and form policies on matters of importance to them; and formulate solutions to problems. They learn that they have a voice in the school and that they have the power to effect change.

WHO THE STAFF IS
Donna Seidenstein developed the project in 1988 as a means of giving students firsthand experience in the democratic process and inspiring them to become active members of their own communities.

WHAT YOU NEED
The most essential ingredients of *Getting on with Government* are a willing teacher and motivated students. Computers and software such as MAC Publish It Easy are useful for publishing a school newspaper. Other materials needed will depend on the activities planned, e.g., designing posters for campaigns and to publicize events; making personalized tee shirts; or creating video presentations.

ADAPTATION TIPS
The civics club represents a functioning, school-based democracy in action; elections and student government activities can be implemented at any school. The PTA is an excellent resource for assisting in school events.

WHY IT WORKS
Beyond teaching citizenship and academic skills, the project allows students to appreciate what they have and what they are capable of accomplishing. For example, the charity fund-raising campaign made them aware of those less fortunate than they are and promoted feelings of concern and success at having been able to help others. "I have seen the pride and self-esteem of our students whenever we undertake and accomplish any project," Seidenstein notes.

Current Affairs

HOW IT WORKS

Current Affairs encourages students to find out what's going on in the world, to analyze world events, and to discuss global issues with their peers. Students are required to find out about the news and to report to the class on one of six issues: international news, national news, local news, weather, entertainment, and sports. One period a week is devoted to student reports to the class. Once a month, students tape their *Current Affairs* presentation on the school VCR. The project integrates reading, writing, pubic speaking, social studies, math, and art as students write news stories; create maps, signs, and graphs to illustrate major points; and practice their presentations. Taping the news project is the highlight of the month for them; the room takes on the aura of a TV studio as students, dressed in their best clothes, present their news stories to the other classes in the school.

WHO THE STAFF IS

Belinda Morris has been teaching current events using the *Current Affairs* format for three years. She has found the VCR to be a powerful motivational tool for teaching current events—students not only create a finished product, but they can share their work with other students.

WHAT YOU NEED

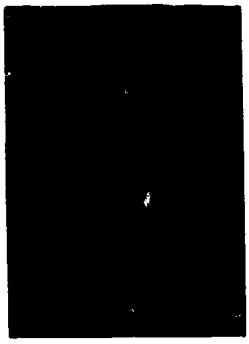
Students use one period a week to report their stories to the class and one afternoon a month to tape the news projects. The class has a subscription to student issues of the *New York Times*. Materials for making props include maps, chart paper, construction paper, markers, and paint. Video equipment is necessary to tape projects, and televisions are needed so that other classes may view the projects.

ADAPTATION TIPS

Current Affairs is easy to replicate; because the project covers news over a period of one week at a time, teachers can change the format and medium of presentation during the course of the year. If video equipment is not available, teachers may have students create their own newspaper.

WHY IT WORKS

Students enjoy being in the role of news anchor, sports caster, or weatherperson. At the same time, they are encouraged to improve academically. "Any class will become motivated when faced with the challenge of being recorded and seen on a VCR," says Morris.



MORE INFORMATION

Belinda Morris
PS 143, CSD 24
34-74 113 Street
Corona, NY 11368
(718) 429-0777
Principal: Thomas B. Mays

Courting Civil Rights

HOW IT WORKS

Courting Civil Rights gives students a working knowledge of the U.S. judicial system as well as an in-depth understanding of the civil rights movement. By learning about famous civil rights cases of the past, students develop a deeper understanding of current events and how they can work for social change. Students are presented with a general overview of a civil rights case (e.g., *Brown* v. *Board of Education*) and are taught courtroom procedure and appropriate legal terminology. After discussing the history of the civil rights movement through handouts, videos from the PBS series *Eyes on the Prize*, and other resources, they are responsible for working cooperatively to prepare a given case for the plaintiff or the defense. Finally, they present their cases to their peers and faculty, with the teacher acting as judge.

Courting Civil Rights strenghtens students' oral and writing skills as they write their own arguments and dialog and play such parts as lawyers, bailiff, stenographer and witnesses. It gives them an opportunity to work cooperatively toward a common goal and to develop the analytical skills that are necessary for understanding the major social issues of our time.

WHO THE STAFF IS

Jennifer Eden Hinderstein developed the project as a result of her interest and activity in multicultural affairs. She is available to provide consultation to interested colleagues as well as sample lesson plans, student work samples, resource lists, and other materials.

WHAT YOU NEED

The project requires a least two teaching periods a week. In addition to legal pads and other basic supplies, the project uses the video series *Eyes on the Prize* to introduce students to civil rights history. Students' presentations are videotaped. Props such as a gavel are recommended to give presentions authenticity. Library materials and other resources are needed for students to research cases.

ADAPTATION TIPS

Courting Civil Rights may be enriched by parent and community involvement, a class trip to a court in session, or guest speakers. Teachers may want to use additional introductory materials, such as relevant works of fiction. The project is interdisciplinary and can be taught using a whole-language approach.

WHY IT WORKS

By participating in the project, students gain an awareness of social issues and can articulate peaceful remedies to current problems in American society. They have developed a sense of themselves as powerful and competent citizens, says Hinderstein. "After having taught *Courting Civil Rights* with my sixth graders, all they want to know is 'When can we do it again?'"

MORE INFORMATION

Jennifer Eden Hinderstein
PS 174, CSD 28
65-10 Dieterle Crescent
Rego Park, NY 11374
(718) 897-7006
Principal: William Bet

IMPACT II $200 Adaptor Grant Application Guidelines

1. Only New York City teachers are eligible to apply.
2. Applicants are licensed, classroom-based, and currently teaching in a New York City public school.
3. Applicants made contact, at least once, with the IMPACT II project disseminator(s).
4. Applications will be reviewed by the staff and then evaluated and ranked by the project disseminators.
5. Applicants will be notified of the $200 grant award status by June 1994. No information will be given out beforehand.
6. All applications must be typed or word-processed and two photocopies must accompany the original.
7. All applications and guidelines may be duplicated as needed.
8. If you have any questions regarding the IMPACT II adaptor grantmaking process, please contact the IMPACT II disseminators, or call the IMPACT II staff at (212) 374-1451.
9. DEADLINE: April 15, 1994
10. Only IMPACT II disseminator projects listed in the current IMPACT II catalog are eligible for $200 adaptor grants.

IMPACT II

BOARD OF EDUCATION OF THE CITY OF NEW YORK
Division of Instruction and Professional Development

IMPACT II Adaptor Application

(Applications must be typed.)

Deadline April 15, 1994

Applicant's Name _____

License _____

School Name/Number _____

_____

School Telephone (_____) _____

Dist., Borough, or Sp. Ed. Region _____

School Address _____

_____

Home Address _____

_____

Zip _____

Home Telephone (___ ___) _____

Supervisor's Title: Principal ☐ Director ☐ Spec. Ed. Supervisor ☐

Supervisor's Name _____

Catalog Title of Disseminator Project _____

Project Disseminator's Name _____

Were you able to make direct contact with the disseminator teacher?

Yes ☐ No ☐

NOTE: ONLY THOSE APPLICANTS WHO HAVE MADE DIRECT CONTACT WITH THE PROJECT DISSEMINATOR CAN BE AWARDED THE GRANT.

If no, please explain: _____

_____

_____

APPLICANT'S CONTACT WITH THE DISSEMINATOR TEACHER:

Date(s) of Contact	Type of Contact: telephone, school visits, letters	Comments or Issues Discussed

When do you plan to adapt this project in your class? Date: _____

What is the educational need for this project in your class/school? _____

_____

_____

What qualities of this projects most impressed and interested you? Why? _____

_____

_____

How will this project be implemented into your regular program, teaching schedule, daily operations, and curriculum?
(Please explain in detail. Use additional pages if necessary.)

_____

_____

_____

_____

_____

What materials would you need in order to adapt this project in your class? Please list them below with approximate costs.
(Total not to exceed $200.)

Item Description	Approximate Cost
Total	

APPLICANT'S PRESENT TEACHING ASSIGNMENT

Subject Area(s) _____

Grade(s) _____ Total number of years teaching experience _____

Total number of students by grade level who will be involved in the adaptor project:
(Base answers on your current enrollment.)

K _____	4 _____	7 _____	10 _____
1 _____	5 _____	8 _____	11 _____
3 _____	6 _____	9 _____	12 _____

Achievement levels and special groupings of the students involved in the project:
Indicate the number in each category. Do not duplicate numbers. Your professional estimates are acceptable.

Above Average _____	Average _____	Below Average _____
Enrichment/Gifted and Talented _____	Special Education _____	Bilingual/ESL _____
Drop-out Prevention _____		

STAFF AND RESOURCES

What other staff members would be involved in the adaptation of the program?
(e.g., paraprofessionals, parents, resource personnel, etc.)

_____

_____

_____

What other resources does your class, program or school have to assist with the adaptation of this program?
(e.g., equipment, instructional materials, community services, grants, etc.)

_____

_____

_____

Would you be able to visit the disseminator's school for a consultation if IMPACT II provides funds for coverage by a substitute teacher?

Yes ☐ No ☐

If no, please explain: _____

_____

_____

ADMISTRATIVE SUPPORT

(This section must be completed by the school principal/director/special education supervisor in order for that the application be considered for a grant.)

I support implementation of this project during the school year _____ to _____

Can the applicant be released to visit the disseminator's school for program consultation if IMPACT II provides funds for coverage by a substitute teacher?

Yes ☐ No ☐

Can teachers and IMPACT II staff visit the adaptor's project on a limited basis with prior approval?

Yes ☐ No ☐

If the adaptor's project is successful, will you be able to fund its continuance as part of the regular school budget next year?

Yes ☐ No ☐

Comments: _____

_____

_____

_____

_____

_____ _____

Principal's/Director/or Special Education Supervisor's Signature

_____

Applicant's Signature

_____ _____

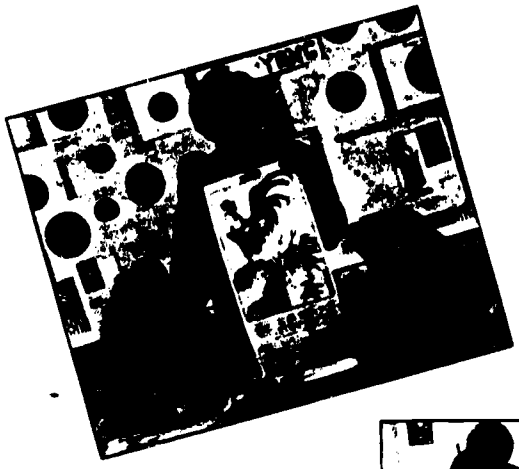
Date

_____

Date

Reminder: Completed Applications (plus two copies) must be received by April 15, 1994 at the

IMPACT II
Suite 900,
100 Trinity Place,
New York, NY 10006



Sociology: A World of Similarities and Differences

HOW IT WORKS

Sociology: A World of Similarities and Differences takes advantage of the various cultural backgrounds of the students in the school to help them learn about cultures around the world. Students begin by making a family tree to learn more about their own heritage and traditions; as they share this information with the class, they learn about the similarities and differences among cultures and how each has contributed to life in the United States. Lesson plans are based on the information that the students offer. For example, because many students in a particular class were Chinese, the class engaged in a study of Chinese history and culture; lessons included art and writing activities related to Chinese holidays and customs and an examination of the experience of Chinese immigrants to this country. Students visited Chinatown and ate at a Chinese restaurant. The class engaged in similar activities on African culture and also celebrated African American Heritage month by doing research projects on African American historical figures. The project ties into the annual multicultural fair, in which students prepare various foods from around the world, dress up in native costumes, and display their classwork. Parents and community members actively participate in this event. Through hands-on experiences, students learn about themselves and their classmates and develop greater sensitivity and respect for one another.

WHO THE STAFF IS

Anita Zaret and Rosalie Cooper developed *A World of Similarities and Differences* in 1991; the idea for the project grew out of their understanding that, with as many as 12 cultures represented by the student body of the school, there was clearly a need for students to learn more about one another and to show how each culture enriches our society.

WHAT YOU NEED

Basic materials include books and other resource materials on various cultures, notebooks for student journals, and materials for art projects. Community resources, such as museums, theaters, and restaurants, enrich children's experiences.

ADAPTATION TIPS

Teachers can adapt the project in a variety of ways, depending on the cultural composition of their classes. One way to begin is to have students bring in a family heirloom to discuss with the class. This may lead into a discussion of students' cultural backgrounds and the unique contributions of each culture. Teachers may plan lessons, activities, and special events accordingly. Instructional strategies, student work samples, and a course outline are available to those interested in running the project in their own schools.

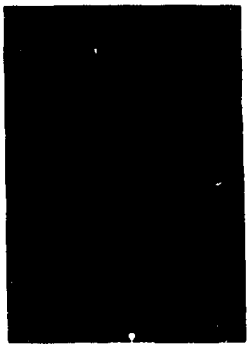
WHY IT WORKS

The project motivates students by allowing them to find out about their own family history and heritage. Students have been particularly excited about going on field trips and about displaying their work. At the same time, they have become more cooperative and are better able to work in groups. "They find that they have more freedom to learn from one another and ask questions about one another's backgrounds," say Zaret and Cooper.

MORE INFORMATION

Anita Zaret and Rosalie Cooper
JHS 210, CSD 27
93-11 101st Avenue
Ozone Park, NY 11416
(718) 845-5942
Principal: Matthew Bromme

How Decisions Affect Our Life Chances



MORE INFORMATION
Bernard Feldman and
Charles Orgel
William Howard Taft High School
240 East 172nd Street
Bronx, NY 10457
(718) 293-7200
Principal: Mary Ann Macon

HOW IT WORKS
Adolescents frequently make decisions that negatively affect their future; many inner city youngsters have limited exposure to the attitudes and values that promote success. ***How Decisions Affect Our Life Chances*** employs sociological concepts and findings to show students how decisions they make in the present determine the kinds of opportunities available to them in the future. Its purpose is to increase students' awareness of the relationship between actions and their consequences and to enable them to make positive choices in their lives. Students are assigned readings on primary social institutions, such as the family, the educational system, and the American economic structure. Discussions of the family, which focus on such aspects as mate selection and divorce, facilitate an understanding of the elements involved in successful and unsuccessful marriages. An analysis of the educational system in the United States shows the relationship between education and life opportunities. The classic study of Blau and Duncan on the American occupational structure heightens students' understanding of its functioning and demonstrates how social expectations and individual decisions influence the direction of our lives. Field trips and guest speakers enrich the project.

WHO THE STAFF IS
Social studies teacher Bernard Feldman has made presentations on educational issues before numerous organizations, including the U.S. Department of Energy, the New York State Urban Development Corporation, and the New York City Board of Education; he developed the project in collaboration with Charles Orgel, chairman of the social studies department at William Howard Taft High School.

WHAT YOU NEED
A supportive principal and social studies chairperson, a teacher with extensive background in behavioral sciences, and a receptive student body made *How Decisions Affect Our Life Chances* possible. A bibliography and a list of outside resources used in the project are available to interested educators.

ADAPTATION TIPS
The course is easy to replicate in that it uses standard behavioral science material as a conceptual framework. The significance of students' personal decisions as a focus of analysis can also be introduced in psychology, social studies, and global citizenship courses that examine the association between decisions and life chances at both the individual and the societal levels.

WHY IT WORKS
All too frequently, students feel that the content of a particular course has little or no relationship to their life situations. Because this course focuses on topics that they are most interested in, they are motivated to learn. The course has been taught to college students, says Feldman, and "many of them told me that if they had such a course in high school, they would have made more productive decisions."

Across the Curriculum through Video

HOW IT WORKS

Across the Curriculum through Video is an interdisciplinary project that integrates the ninth grade English and social studies curricula. The social studies unit, which covers the history, geography, and culture of India, China, and Japan, is reinforced in the English class with oral, reading, and writing exercises related to these countries. By relating the subject areas, students see the connections between various subjects as teachers discover ways to transcend the boundaries of their disciplines. In the project, lessons, student presentations, and day-to-day planning sessions are videotaped; seeing themselves on videotape motivates students and allows them to critique their own work and observe their progress. At the same time, teachers use the tapes to learn about interdisciplinary instruction. Teachers can use the tapes to rework or restructure their lesson plans to meet specific objectives. Videos present special projects, role playing, interviews, news shows, skits on historical events, and debates.

WHO THE STAFF IS

Robert Gross, communications coordinator at August Martin for the past 11 years, developed the project in collaboration with Ann Ferrelli, who serves as a faculty advisor for the school newspaper. By recording the actual development of an interdisciplinary curriculum, they hope to provide other teachers with ideas for interdisciplinary teaching as well as an exciting learning tool for students.

WHAT YOU NEED

Across the Curriculum through Video involves four ninth grade classes (two English classes and two social studies classes), two English teachers, two social studies teachers, an advanced video class, and a video teacher. The classes are taped by an advanced video student or in the TV studio by the video class. All lessons are coordinated by the English, social studies, and video teachers. Advanced video students edit the final tape.

ADAPTATION TIPS

Videotapes of *Across the Curriculum through Video* are available to those teachers interested in planning their own interdisciplinary curricula. The videos serves as models on which teachers can base their own projects; they may elaborate on and modify ideas to suit their needs.

WHY IT WORKS

"Knowing that they are on camera has motivated students to take their work and themselves more seriously," say project disseminators Gross and Ferrelli. Students in the classes involved in the project have higher scores and improved attendance and have become more expressive and invested in their writing and performance. At the same time, the project has been a valuable means for teachers of English and social studies to work together to coordinate their lessons.

MORE INFORMATION

Robert Gross and Ann Ferrelli
August Martin High School
156-01 Baisley Boulevard
Jamaica, NY 11434
(718) 528-2920
Principal: Leslie Gurka

Model United Nations

MORE INFORMATION
Vicki Wojcik
Washington Irving High School
40 Irving Place
New York, NY 10003
(212) 674-5000
Principal: Robert Durkin

HOW IT WORKS

Model United Nations involves students in learning about major world issues and developing an appreciation of the differing perspectives and needs of other nations. The idea was first presented to the Academy of Public Service senior class; a student planning committee was formed from this group and other interested students. Other students worked with teachers to organize national delegations. Eighteen nations were represented in the event; delegations included students from regular and bilingual social studies classes and clubs. Teacher advisers helped the delegations research the countries and the issues being debated. The foreign language department provided student interpreters. The planning committee formed the U.N. staff and chaired the committee meetings; last year's committees dealt with ethnic tensions, the environment, world health, and human rights. Students wrote position papers, resolutions and prepared formal speeches for presentation at the general assembly. Foreign language students translated speeches and interpreted during debates, and art students designed logos, posters, and delegation signs. The general assembly meeting brought all delegations together to debate issues and vote on resolutions. The event gave students opportunities to develop skills in research, public speaking, and leadership. They learned how to negotiate and compromise and gained an appreciation of global issues from the viewpoints of other nations. Future goals are to initiate an annual *Model United Nations* that will include delegations from other high schools.

WHO THE STAFF IS

Vicki Wojcik developed *Model United Nations* in 1992 in conjunction with the Foreign Policy Association. Many other teachers at the school were actively involved in the project, serving as delegation advisers and helping students do research and prepare for the event.

WHAT YOU NEED

Informational materials on organizing a *Model United Nations* were purchased from the UNA-USA; additional materials, such as pamphlets and posters, were purchased from the United Nations. Students used *Great Decisions*, a magazine and activity book published by the Foreign Policy Association, to research topics for presentation and debate. Other research materials may be found in the school or public library. U.N. videos are also available for purchase. Schools may want to videotape the event.

ADAPTATION TIPS

Model United Nations fits well into today's curriculum, which emphasizes the importance of multiculturalism and global citizenship. Washington Irving would like other schools to participate in the project; for those schools who want to become involved or for those wishing to organize their own event, a videotape of the event is available that can be used to demonstrate how it was run. Staff can provide ideas, assistance, and sample materials upon request.

WHY IT WORKS

The *Model United Nations* movement has proved to be popular throughout the country in colleges and high schools. Students take ownership of this event; they do most of the organizing and lead all the meetings, including the general assembly, as well as typing and producing materials. This has been a genuine boost to their sense of competence and self-esteem. The student planning committee drew up an evaluation form for participants; responses were very positive. They included: "It was impressive and made me learn a lot about the world," "It was quite exceptional," and "I did better than I expected. I was very outspoken and made my points clearly."

Project GREAT: Global Renaissance--Enriching Artistic Travels

High School Grades 9-12

HOW IT WORKS

Project GREAT immerses students in the cultural life of countries around the world through music, art, photographs, and video. An exploration of American musical forms shows that American music has its roots in the music of other nations. Rock and roll has both Latin and African influences; in the American theater, numerous plays, such as *The King and I* and *South Pacific*, are set in other countries. The project helps students to make these connections and to explore the arts and traditions of other cultures in depth. The project is designed to awaken students' curiosity about other nations and cultures, to develop in them an appreciation of the arts, and to encourage greater sensitivity and tolerance for peoples of all nationalities and backgrounds.

The teacher introduces the class to countries around the world with presentations and activities. As motivation for writing Haiku, students listen to music from *Madame Butterfly* and view slides of Japan. Students' work is published in the school calendar. Teams of students research a particular nation or region and complete arts-related projects. The project includes special events such as dance festivals, trips to museums, and student presentations to the community. Among exciting past events were a trip to the Amazon Rainforest at the Museum of Natural History, a student-produced multicultural show presented at Kings County Hospital, and a Greek Festival held at the United Federation of Teachers headquarters.

WHO THE STAFF IS

Project director Bernard Schwartz began *Project GREAT* in 1991. The project now involves 30 children and makes use of numerous community resources.

WHAT YOU NEED

A teacher meets with two classes of 15 students per class. Cassette players, a VCR, and a phonograph are needed, as well as photographs, slides, and literature from around the world. Maps, books, and other research materials are also necessary for student projects. Community resources provide an important source of enrichment and information and are used extensively.

ADAPTATION TIPS

Project GREAT is a cross-disciplinary project that integrates music, poetry, dance, art, and social studies. The possibilities for themes, activities, and projects are almost limitless. The teacher may select a country, region of the world, or a particular theme to be explored from an international perspective. Materials, a course outline, and consultation are available to interested educators upon request.

WHY IT WORKS

Project GREAT has been inspiring to the students; they are highly motivated to attend class and have responded positively to its interdisciplinary, multicultural approach. Because of its flexibility, projects develop in imaginative and sometimes unexpected ways. "Last term, one of my students expressed an interest in Reggae music," recounts Schwartz. "I arranged for him to attend a conference on West Indian issues and he met Une Clarke, the first City Council member from the West Indies."

MORE INFORMATION

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James Madison High School
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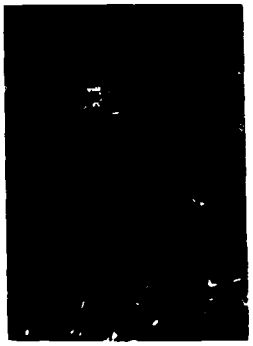
Brooklyn, NY 11229
(718) 966-5624
Principal: Arlene Jordan

Charter of Global Responsibility for the 21st Century



MORE INFORMATION
Linda K. Steinmann
Forest Hills High School
67-01 110th Street
Forest Hills, NY 11375
(718) 268-3137
Principal: Rowena O'Shaughnessy

HOW IT WORKS

Charter of Global Responsibility for the 21st Century offers students opportunities to analyze global affairs and articulate their vision of positive change in the world. The purpose of the project is to get students to work together and share in the achievement of a common good. Students are encouraged to see events and problems from a global perspective and to harness their own power and creativity to create change. In the process, they strengthen their research, analytical, verbal, and writing skills. Participants researched and wrote their own contribution to the charter, which was presented at a town meeting sponsored by the Foreign Policy Association (FPA). The students and teacher met after school for six weeks; after agreeing on the topic Nonviolent Conflict Resolution, students shared bibliographic material and did further research. At the second meeting, the group was divided into four subgroups, which broke the topic down into specific areas for study and writing. At subsequent meetings, the group analyzed and critiqued the draft articles. Once the articles were revised and published, they were submitted to the FPA for consideration. At the town meeting, student-contributors read aloud from the charter. The audience included guests representing the United Nations and the media, along with representatives of the FPA. Students at the town meeting were a heterogeneous grouping from public and private city and suburban schools. The views of participants represented diverse cultural and socioeconomic perspectives, which made the experience particularly enriching for all.

WHO THE STAFF IS

The project was developed by high school teacher Linda Steinmann in cooperation with the FPA. It was first conducted in 1992. Amon Diggs, of the FPA, addressed the senior U.S. government class on the various topics that were on the agenda for the charter. The association also provided the class with a packet of materials for the project.

WHAT YOU NEED

The project used materials provided by the Foreign Policy Association, including *Great Decisions* magazine and activity book. All the teacher needs is access to a good school or public library and the ability to direct students in their research and writing. Access to a video camera is desirable but not required.

ADAPTATION TIPS

Although involvement with the Foreign Policy Association and travel into a central location (Manhattan) were among the highlights of the project, a teacher could modify and adapt the project to suit his or her school community. A project with similar goals can be set up in which parents and teachers become the audience and the dignitaries. Materials from the United Nations, or an actual visit to U.N. headquarters, may also be included.

WHY IT WORKS

Through their participation in *Charter of Global Responsibility for the 21st Century*, students learn that it is not enough simply to have an opinion about significant global issues; rather, it is the role of a citizen to speak out cogently on these issues. Students have strongly held opinions and a fervent desire to make their opinions heard. "The students' attendance was 100% at every meeting," says Steinmann. "Their charter articles were first rate, and their performance at the town meeting was excellent."

Mathematics

Tap Your Feet... Count the Beat

MORE INFORMATION
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HOW IT WORKS

Tap Your Feet...Count the Beat uses tap dance as a means of teaching basic math concepts while providing children with experiences that build self-esteem and improve attention span. Tap dance offers a unique opportunity to develop motor, perceptual, and cognitive skills, and the total child is involved in the learning process. As children learn dance routines, for example, they use the sounds of various steps to count, add and subtract, and to demonstrate greater than and less than and ordinal numbers. Children also create stories, learn syllbles by tapping out words, and learn new words. Balance, coordination, and cardiovascular fitness are improved.

Twenty-four students participate in the project, and each class of six children participates in two tap classes per week. In addition, eight to ten children are selected for special pull-out twice a week. These children are chosen based on their advanced level and interest in the dance form. One period is scheduled for students who need help in learning and remembering the concepts and steps being taught. As they learn to dance, children acquire interpersonal and intrapersonal skills, self-discipline, and a sense of mastery. They learn how to cooperate, to listen and follow directions, and to wait their turn. The students perform several times a year for other students, staff, parents and caretakers, and community residents.

WHO THE STAFF IS

Tavia S. Trusch, a registered dance/movement therapist and special education teacher, has worked with special education children for ten years and developed a creative movement project for SIE VII A students. She first taught this project in 1992 and has presented it at various conferences. She is available to share her ideas and to hold workshops for teachers who are interested in adapting the project. She recently set up an arts-in-partnership project with the tap dancer Harold Nicholas in order to promote her project.

WHAT YOU NEED

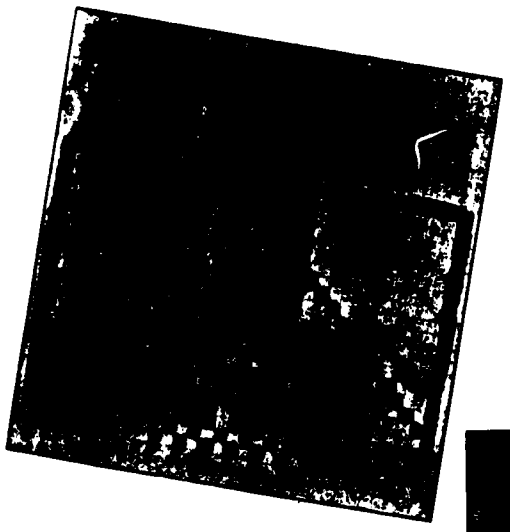
Materials include a wood floor in any large, open space, such as a gymnasium or auditorium; full-sized mirrors (preferably mounted on the wall) for children to observe themselves and their classmates; tap shoes or hard-soled shoes with taps attached (heel and toe), a video camera for taping sessions and performances; and a dual cassette player, compact disk player, or record player. The videotapes "Tap," with Gregory Hines, and "Stormy Weather" are useful tools. Available from the project disseminator are project guidelines, lessons and worksheets, a book reference list and resource guide, and an instructional videotape.

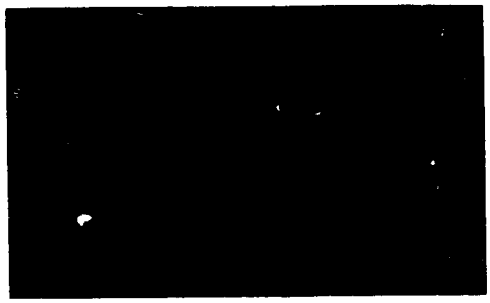
ADAPTATION TIPS

Any teacher, paraprofessional, or parent who has an interest in tap dance can implement or participate in this project. If an auditorium or large space is unavailable, teachers can use the classroom by moving desks out of the way. If no wood floor is available, plywood practice boards can be used. If mirrors are not available, children can stand in front of the windows or a large TV screen and observe their reflections. In lieu of tap shoes, hard-soled shoes may be used, metal show taps or thumbtacks can be used to get the effect of tap sound.

WHY IT WORKS

Children enjoy learning how to tap dance. As they master the various steps, the feedback is immediate and they feel good about themselves. As self-esteem and confidence improve, they are better able to concentrate and they experience success in other areas. "The teachers in the school have noticed this," says Trusch. "At the holiday show," she recounts, "the children danced wonderful dances and sang holiday songs. There was no acting out, no fights or hysterics—a significant accomplishment here! They remembered their routines and their places on stage, and they did it without any sense of stress."





Pictogram Mathematics

HOW IT WORKS

Pictogram Mathematics offers children a fun and engaging way of learning basic mathematical concepts such as counting, addition, multiplication, graphing, and locating ordered pairs. Using graph paper, the children begin by making simple drawings that involve counting and coloring the boxes in various directions. They proceed to increasingly complex drawings involving more advanced mathematical problems; these may involve such questions as: "If we have shaded 10 boxes in a southerly direction and 8 boxes in an easterly direction, how many boxes have we shaded?" Or "If we have shaded an area 4 units long and 3 units wide, how big an area have we shaded?" As they work on their drawings, they gain an understanding of directions. Children love to draw and to have something to show for their efforts. The pictogram provides a structured approach to drawing technique, much the way the computer draws on a screen, while giving children the pleasure of displaying their finished products. Because the concepts learned are related to something they can see and touch, they are motivated to solve mathematical problems related to their drawings and to participate in class discussions.

WHO THE STAFF IS

Joel Finkel, developer of *Pictogram Mathematics*, is available to discuss the project and can offer a sequential set of drawings to demonstrate children's progress

WHAT YOU NEED

Basic materials are graph paper, crayons or markers, and scissors and construction paper to cut out and mount children's work.

ADAPTATION TIPS

Any regular classroom teacher can run the project. Teachers will find it fun, simple to adapt, and inexpensive.

WHY IT WORKS

Pictogram Mathematics capitalizes on children's natural desire to draw, which is often frustrated by the lack of a structured approach to teaching artistic principles and technique. "The array of successful drawings produced by the children, their grasp of mathematical concepts, their avid participation in class discussion, and the smiles on their faces as they engage in the project are the clearest indications of its success," Finkel observes.

MORE INFORMATION

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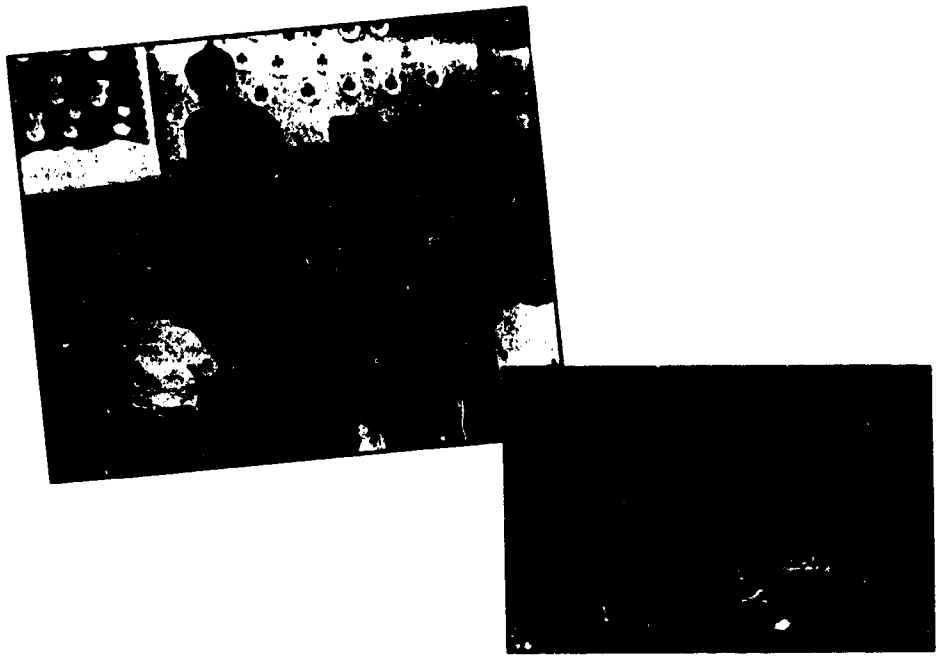
Linked Up for Measurement



MORE INFORMATION
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HOW IT WORKS

Linked Up for Measurement engages children in manipulating familiar materials to learn the mathematical concepts of nonstandard measurement; to explore, conjecture, reason, and communicate their ideas as they weigh, fill, and measure; and to work together cooperatively as they explore problems. The project is designed to prepare children for the CAT 5 math test. Children become familiar with Lots-of-Links and then begin using the links to measure. The teacher shows them how to measure a straight line and fill various containe s. After several experiences with measuring pencils, crayons, and books for length, children are directed to measure and weigh items from plastic bags on their desks and to measure their own height and waist. Children are then given a set of plastic measuring cups and have to decide how many links will fill a particular cup. Using a balance scale, they compare the weight of a number of links to that of a familiar object.

Through these and other creative excercises, which children perform individually and in small groups, they learn to add on to or take away from a chain of links to measure length; to estimate how many links are needed for a certain length; and to sort, pattern, and create groupings using the four colors. Children are interested in their own size, neight, and growth; they can use the links to measure arm and leg length. They enjoy using the vocabulary of nonstandard measurement and can apply the words during snacks, parties, and other activities. As they gain confidence in their abilities, they gain in other subject areas as well.

WHO THE STAFF IS

Maureen Suchin has successfully taught *Linked Up for Measurement* for three years to monolingual and bilingual classes. She has presented it at workshops for teachers and parents and is available to give demonstrations and consultations to teachers interested in initiating it in their own schools.

WHAT YOU NEED

Materials include Lots-of-Links, measuring cups, balance scales, and plastic bags with collected objects for measuring, e.g., crayons, sponges, plastic spoons, straws, ice cream sticks.

ADAPTATION TIPS

Teachers of grades K through five can adapt this project. It can be implemented with small groups with the teacher as demonstrator and guide. Students can also work alone or with a partner. Teachers may incorporate special projects that enable children to apply what they have learned. For example, findings may be recorded in charts, tables, and graphs. Students can use their learnings to write measurement books or a class mathematics newsletter. Parents and other family members can also get involved in at-home measuring activities with their children.

WHY IT WORKS

As a result of the project, children's skills and behavior have improved remarkably. They have developed greater confidence in their ability to use the materials properly and solve problems related to the tasks. "They have begun to view themselves as doers and achievers," says Suchin. "The excitement in the room, the discussions, and the children's comments as they work reveal their motivation and their increasing proficiency," she notes.

Math Styles Workshops

HOW IT WORKS

Students learn mathematics according to their own learning styles in the ***Math Styles Workshops*** project. After taking a learning styles inventory, students become the center of instruction as they are given the opportunity to work cooperatively, or alone, on a variety of interdisciplinary projects related to real life situations. Learning situations set up by the teacher according to the learning styles of students guide them through the learning process. The lecture and listen mode of teaching is not utilized. Learning styles activities and instructional strategies based on the findings of cognitive research, integrate the NCTM Standards. This multi-level project provides activities for students who are functioning at different levels in a class.

During math lessons students have the option of activities such as using manipulative materials, viewing a video, presenting an oral report, listening to a recording, using electroboards, working on a contract activity package, or engaging in a project ed learning sequence. Exciting activities include Electro Math, a self-correcting activity that allows students to test their knowledge of mathematics, the Math Pals Club, a peer tutoring situation established within the classroom whereby students of different at levels help each other to learn mathematics, and Math with Manipulatives, an activity in which students explore math topics using a variety of manipulative materials.

This project aims to increase the level of parental involvement in mathematics education and on a monthly basis parents and their children participate in *Math Styles Workshops*. Each workshop focuses on a particular math topic.

WHO THE STAFF IS

Yolette Alcindor, a teacher at PS 316 in Brooklyn developed the *Math Styles Workshops* project. She is continuing to plan new workshops with students, parents, and teachers to motivate students to learn mathematics.

WHAT YOU NEED

The *Math Styles Workshops* project begins with an orientation in which teachers become familiar with learning styles research. Classroom materials include a mathematics manipulatives kit, electroboard, recordings and player, VCR, videos, oaktag and markers, film and processing, batteries, light bulbs.

ADAPTATION TIPS

Interested educators can contact the project disseminator to participate in *Math Styles Workshops* for teachers. Sample lessons are available to workshop participants.

WHY IT WORKS

"I consider this project to be successful due to the quality of the products that are generated by the students," says Alcindor. "In the *Math Styles Workshops* the students learn mathematics the way they learn best. This is the biggest motivating factor of all."

MORE INFORMATION

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Math through the Museum Experience

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HOW IT WORKS

Math through the Museum Experience is an integrated project that motivates students to learn mathematical concepts through museum visits and hands-on activities in math and art. All activities are geared toward observing and understanding visual art by applying the principles of design, spacial relationships, perspective, linear discrimination, repetition, form, balance, and composition. At the start of the project, students visit museums to view modern and traditional paintings. The class discusses mathematical concepts derived from their observations. For example, the class focused on Van Gogh's painting *Starry Night* to explore lines. After tracing a reproduction of the painting, the class was asked: "What kinds of lines do you find?" "Are they repeated anywhere else?" "Which terms best describe the lines in your tracing?" In this way, students learn vocabulary words relating to lines (vertical, diagonal, curved, etc.). In another exercise, children studied Calder's work and then created mobiles as a way of exploring concepts of line, balance, weight, and form. The project gives students a new perspective on mathematics by revealing relationships between mathematical principles, the visual arts, and the world around them.

WHO THE STAFF IS

Sandra Kaplan is a special education teacher at PS 197 and teaches creative arts classes at Adelphi and Long Island universities. She is available to offer workshops and consultations for teachers who want to adapt the project to their own classes.

WHAT YOU NEED

Museums are the primary community resource used in the project. A museum docent may assist the class during museum visits. Basic materials include small reproductions of paintings, plastic sheets, grease pencils, colored construction paper, protractors, strings, scissors, and paper. A slide projector, screen, and slides of paintings are useful for class discussion but are not necessary.

ADAPTATION TIPS

Math through the Museum Experience can be adapted to many curriculum areas. The project is interdisciplinary and multicultural. For example, a teacher might have students view a reproduction of Joseph Stella's painting *Brooklyn Bridge, Variations on an Old Theme* and devise critical-thinking questions for class discussion. The class could take a walk across the bridge and observe lines, shapes, and forms; then they could construct their own bridge. Or the class could go on walks in the neighborhood to observe architectural forms. Photography might also be introduced; students could look through a viewfinder and describe the lines and aspects of form.

WHY IT WORKS

By allowing students to apply their learning creatively, teachers help them develop positive attitudes toward learning and toward themselves. These students have become more active in class discussions, have improved their reading and writing skills, and have significantly increased their scores on the city-wide tests. "The children I work with often have difficulty understanding new concepts," says Kaplan. "Now, they not only understand new concepts more quickly but are able to help their classmates solve problems. They have gained the respect of their classmates and, most important, they have gained self-respect," she explains.

Magnetic Bunnies and Other Math Manipulatives

HOW IT WORKS

In ***Magnetic Bunnies and Other Math Manipulatives,*** children create manipulative math activity books filled with student-made word problems and activities. The books are individualized and geared to each child's level of understanding; as children learn new mathematics concepts and acquire new skills, they can incorporate these in their books. The books contain wheels to turn that make a variety of shapes. They also include magnetic strips with hand-made magnetic bunnies that jump on a number line to illustrate addition, multiplication, and other mathematical operations. Each child draws shelves of a store with various items to purchase. Then they write stories on cards to simulate purchases to be calculated. The cards are self-checking and are held in a pocket in the book. Children incorporate art, reading, writing, as well as math skills in their creations. Students share their work with their classmates; they take pride in having a finished product of their own making that they can display, use, and reuse to reinforce skills.

WHO THE STAFF IS

Project developer Jacqueline Ferrer has presented numerous workshops in her district on making books and class newspapers. She is available to show teachers interested in the project how to construct various manipulatives for inclusion in class books and to provide lesson plans and student work samples.

WHAT YOU NEED

Materials needed for the project include oaktag and poster paper for making charts; assorted 8 1/2" x 11" colored rexograph paper; colored pencils, markers, crayons, and paint; assorted arts and crafts materials such as feathers, sequins, etc.; glue, paper fasteners, and scissors; classroom books on mathematics, e.g., *And Then the Doorbell Rang*; and videotapes to tape the project in action. A paraprofessional can assist in facilitating the project; parents, volunteers, and older students help check the children's progress.

ADAPTATION TIPS

Children can work at their own pace on their books; some books had five pages while others had ten. The teacher who adapts this project can incorporate as little or as many skills as is appropriate, depending on the time available and the needs of the class. The project can be adapted to the needs of older children simply by having them make more elaborate books and by introducing more sophisticated mathematical concepts.

WHY IT WORKS

Magnetic Bunnies and Other Math Manipulatives is an exciting and worthwhile project for children. "Instead of dreading math period, children look forward to the opportunity to learn new skills so they can create new pages for their books," Ferrer explains. They take great pride in sharing their books with other children and in displaying their work for parents and staff to see. Their display won top honors at the school math fair and at the district office math fair.

MORE INFORMATION

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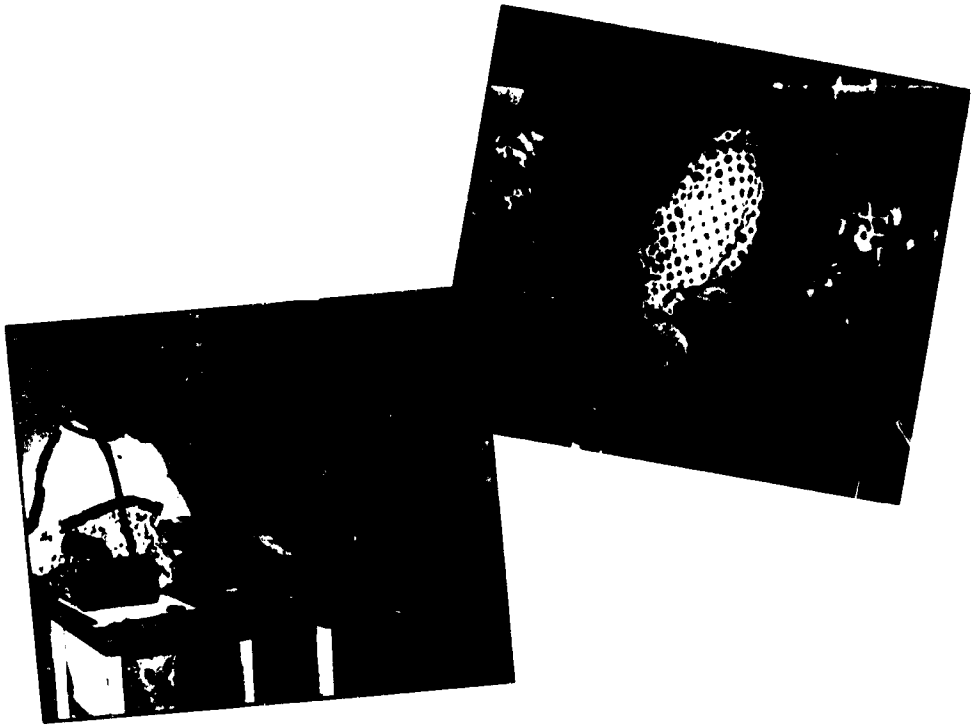
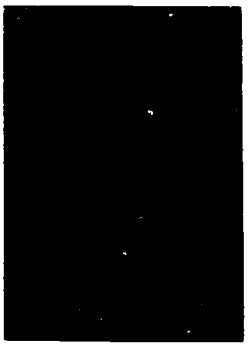
Thirdville: Economics and the Community





MORE INFORMATION
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HOW IT WORKS

Thirdville was created to enrich the academic experiences of third graders while linking their education to the life of the community. Children need to see the relationship between what they are taught in school and the roles they will be expected to play in society. *Thirdville* accomplishes this through hands-on activities and projects in which children apply mathematics, reading, writing, research, and other skills to real-life tasks such as reading a bill, balancing a checkbook, using coupons to save money, understanding money values, filling out forms, and finding a job. Children begin by learning about their own community through word webs, field trips, stories, maps, telephone directories, guest speakers, and community newspapers. After acquiring a basic understanding of community institutions, children participate in the working third grade community of *Thirdville*.

Third grade teachers operate various parts of this simulated community in their classrooms: a bank, store, judicial system, post office, and media center. Working in groups, the children move among the classrooms engaging in specialized projects and activities. Children perform the functions of jurors in the judicial system or loan officers in the bank; they write letters, create stamps, or sort mail in the post office; they work in the store as sales or craftspeople. In the media center, the children create and produce their own newspaper.

WHO THE STAFF IS

Dina Marks has been teaching the economics part of the project for six years; the *Thirdville* community has been in effect since 1992. It is the first project of its kind to introduce economics to the third grade student while incorporating all curriculum areas. She is available to provide materials and group and individual workshops to interested teachers.

WHAT YOU NEED

Basic materials needed are: checkbooks and registers, a rexograph machine, a movable cart for circulating materials made in the store to various classrooms, arts and crafts materials, a camera and film, a video camera and tapes, a VCR, letter size envelopes, books, paper, and pencils.

ADAPTATION TIPS

Thirdville can be implemented by individual teachers or by all teachers within a grade level. Individual teachers can teach economics lessons once weekly in the classroom, setting up the components of the community as learning centers. As a grade-wide project, each teacher can set up a part of the community in his or her classroom.

WHY IT WORKS

"Children are motivated by this project because they are given a chance to apply their academic knowledge to everyday skills that we all need to acquire to survive in today's world," observes Marks. Their interest and eagerness to learn is reflected in improved attendance, better behavior in class, and higher test scores in reading and math. "Parents have remarked that they have noticed changes in their children at home," she notes. "Some children have been aiding their parents in balancing their checkbooks!"

Our Turn—Kids Ask Questions

HOW IT WORKS

Our Turn—Kids Ask Questions was developed in response to the implementation of the NCTM standards reflected in the new assessment in mathematics beginning this spring. Mathematics teaching in the elementary schools can no longer stress computation and arithmetic alone; rather, it must increase children's capacity to think critically, to reason, and to explore problems creatively. The project responds to this challenge through storytelling and legends that stimulate the children's interest and lend themselves to mathematical investigation. The math and reading teachers work collaboratively to locate stories and legends that will stimulate the children's interest and lend themselves to mathematical investigation. After sharing stories the children collectively create their own stories—the sillier and more exaggerated, the better. Then they brainstorm to develop mathematical problems pertaining to each situation. For example, in "The Story of the Five Hundred Dragons," questions may include: "If the prince slayed 57 dragons with his light saber and 194 dragons with his magic sword, how many dragons were alive in the forest?" or "What can the prince do to increase his dragon-slaying power?" The sillier the problem, the more fun the class has and the more motivated the kids are to figure out the answers.

Role-playing, supermarket sale circulars, and Lego Village building materials are incorporated into the project; these further serve to make learning math inventive and enjoyable. Eventually, the children write their own creative math problems that they illustrate and share with their classmates. Finally, the best problems are collected in a newspaper that is written and edited by the children. By creating and sharing their math problems, children gain confidence in their mathematical abilities as well as an interest in further learning.

WHO THE STAFF IS

Susan Hendler, developer of the project, hopes to have many schools participate in the project and to develop a magazine containing the contributions of children from schools all over the city.

WHAT YOU NEED

Materials include a set of Lego Village building materials with Lego figures and parts; construction paper, crayons or cray-pas; a computer and printer, and a photocopier for reproduction of the newspaper.

ADAPTATION TIPS

Elementary school math teachers are encouraged to collaborate with other math teachers, reading specialists, and school librarians to design an effective project. A trip to the local library for a storytelling session is a good way to engage children in activities. The project is conducive to group work: One group may choose to design and construct a Lego structure. Another group may decide to share a favorite legend and use this experience as a basis for creating math problems. A third group might use manipulatives to develop math puzzles. All groups can then report back and share problem-solving activities they have created.

WHY IT WORKS

Many fourth grade students, when confronted with problems requiring mathematical thinking, experience frustration and helplessness—they don't know where to begin. What better way to develop the thinking and reasoning necessary for success in math than to have the kids create problems from their own experience and imagination? "Through this approach, the children are more positive about coming to class and have shared their work with their parents," says Hendler. In addition, there has been a 33 percent increase on the District 19 Benchmark tests in mathematics for participants in the project, she notes.

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Enriching the Advanced Placement Calculus Program

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HOW IT WORKS

Enriching the Advanced Placement Calculus Program enables students to use the graphing calculator as a tool for mathematical exploration and discovery. Starting in 1994 students will be allowed to use calculators on SAT exams. In 1995 all Advanced Placement candidates in calculus will be required to demonstrate proficiency in the use of a graphing calculator. The infusion of the graphing calculator into the secondary school mathematics curriculum provides students with a new means of investigating and verifying mathematical concepts. The purpose of this project is to familiarize students with the graphing calculator, specifically the TI-81 or TI-82 from Texas Instruments; to teach them to apply their computing skills in solving mathematical problems; to enable them to develop skills in computer programming; and to further develop their higher order thinking skills through creative work. After the students are shown how to use the calculator, they work in small groups to solve a variety of problems. As they develop proficiency, they apply their knowledge by writing a project using the graphing calculator. Finally, students demonstrate their proficiency by presenting a mini-lesson on a topic in the mathematics curriculum.

WHO THE STAFF IS

Steven J. Balasiano implemented this project in 1992 as a means of integrating technology and computer programming into advanced mathematics classes. He received an IMPACT II grant in 1986 for his project *Mathematics: An Investigation into Research*. Lesson plans and consultations are available to teachers interested in implementing the project.

WHAT YOU NEED

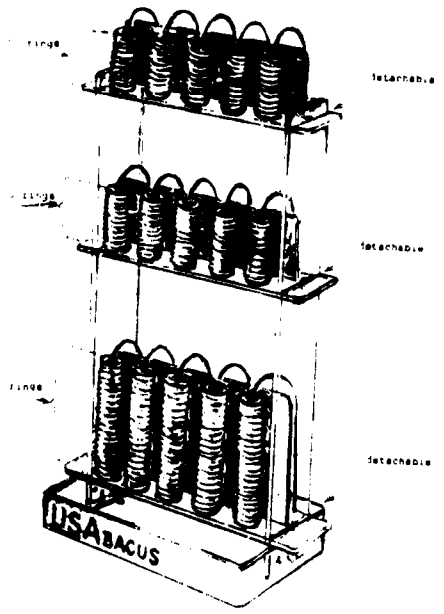
Materials consist of Texas Instrument TI-81 graphing calculators and a viewscreen, an overhead projector, and the manual *Calculus Activities for the TI-81 Graphic Calculator*, by Dennis Pence

ADAPTATION TIPS

Teachers can adapt this project by applying the graphing calculator in lower level high school mathematics courses, such as pre-calculus and sequential mathematics I, II, or III

WHY IT WORKS

The use of the graphing calculator and audiovisual equipment in advanced calculus has been truly motivating for students. The graphing calculator is "a challenging piece of equipment that inspires interest in mathematics," comments Balasiano. "The use of the graphing calculator in the Advanced Placement calculus syllabus created a feeling of unity among the students as they worked together to discover higher level concepts in mathematics," he notes.



The U.S. Abacus (Arithmetic Machine for Cooperative Learning)

Mathematics [illegible]

HOW IT WORKS

The U.S. Abacus is a multisensory teaching aid that makes learning abstract mathematical rules and relationships fun and exciting. By manipulating the colored rings in the U.S. Abacus set, students learn the rules of the four basic operations step by step, beginning with the most simple concepts and gradually moving on to more sophisticated functions. Once students have mastered an operation, they can easily transfer their understanding to paper. Because it is tactile and easy to use, the set is compatible with a wide range of student learning styles and can be used individually or in small groups; its colors and columns make it easy and enjoyable for students to monitor their progress.

WHO THE STAFF IS

J. Chen is a bilingual special education teacher at PS 371 in Brooklyn. Ying Zhang is a bilingual special education teacher at IS 52 in the Bronx. With the assistance of Professor Heard of Rutgers University, they developed the kit in response to the need for a simple, unified teaching aid that would make mathematics interesting and engaging for students.

WHAT YOU NEED

There are three versions of the U.S. Abacus set: Economy ($10.00), Regular ($15.00), and Sophisticated ($30.00). They are safe, easy to use, and can be demonstrated in minutes. No other materials are needed.

ADAPTATION TIPS

Because of its convenience, *The U.S. Abacus* can be easily integrated into any existing mathematics project to introduce or reinforce basic mathematical concepts and operations. Students can use it individually, in pairs, or in small groups. After working with the set, they can transfer their learnings to paper or present them to the class.

WHY IT WORKS

Because the set is fun to use, students have shown increased interest and concentration in mathematics learning and their performance has noticeably improved. It easily attracted the interest of special education teachers and students at the school. "All teachers and most students feel that this is a better teaching aid than others performing similar functions. Many teachers requested sets for their children," said Zhang and Chen.

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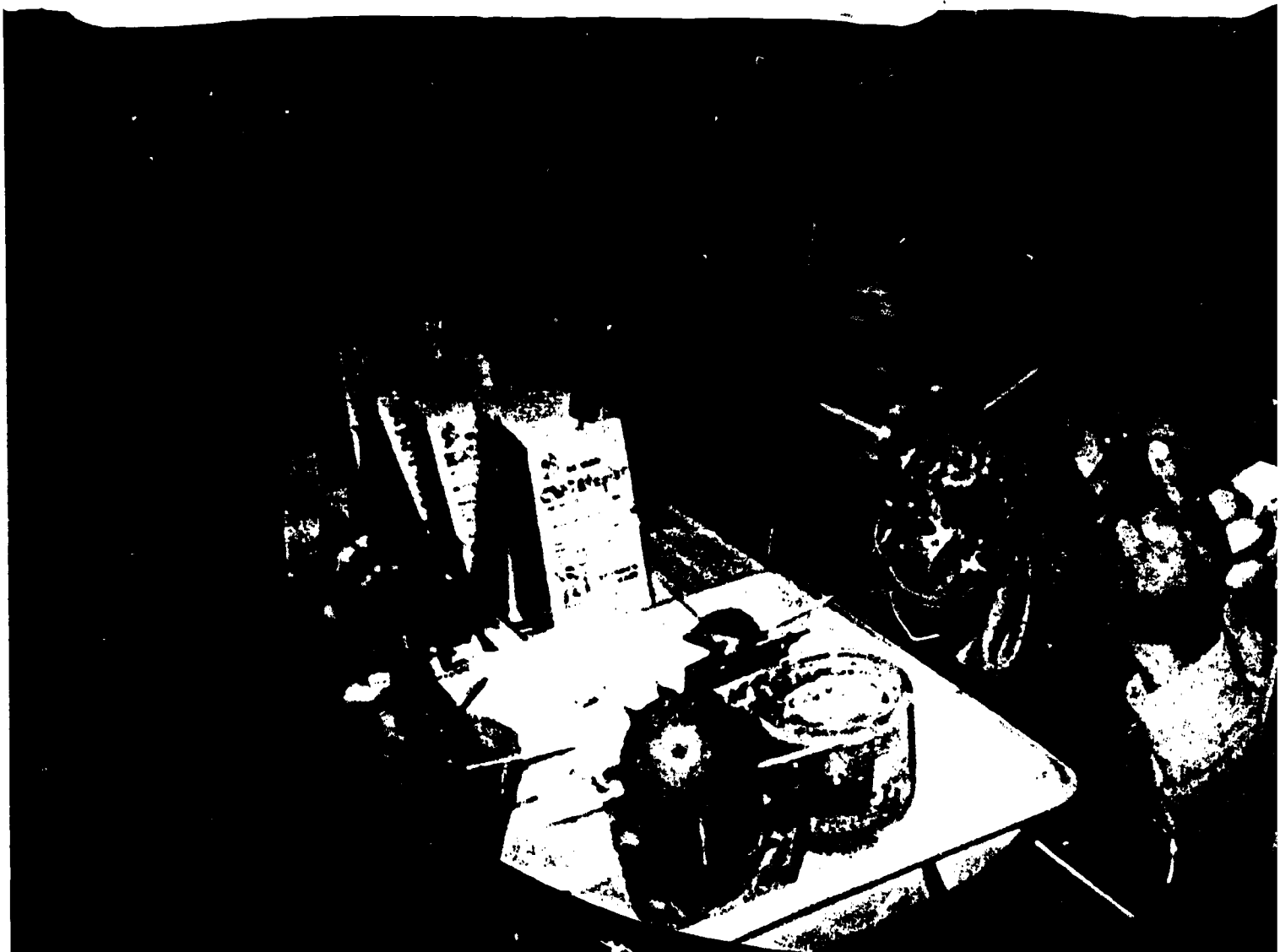

Science

Discoveries

MORE INFORMATION
Donna Ciampa and
Susan Mintz
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HOW IT WORKS

Discoveries is a collaborative project that joins prekindergarten students from a community-based project, mainstream students from a magnet school for science and technology, and severely language delayed special education students. As the project crosses the educational curriculum, it also addresses global citizenship through lessons that promote understanding of and sensitivity toward people with disabilities. The project begins with a small plot of land that was converted into a school community garden. The mainstream and special education students plant flowers and vegetables; seeds and cuttings are grown simultaneously in "secret gardens" in the classrooms. The children also participate in weekly two-hour life science classes.

The children plant fall and summer crops. Teams of students are assigned to daily chores such as weeding, hoeing, and watering. In late fall, students harvest the crops and hold a harvest festival where they sell their homemade products. The classroom pet center is supplied with an incubator, brooder, ant farm, and relevant fiction and other resources. Students record their observations in journals. The pet center promotes responsibility for animal care and provides opportunities to explore how animals develop. Each season features field trips and special events for the children and their parents. By working together on these challenging projects, the children develop genuine friendships and respect for one another.

WHO THE STAFF IS

Donna Ciampa and Susan Mintz are teachers at PS 224. They developed *Discoveries* in collaboration with parents, staff, and administrators in an effort to provide children with opportunities to learn, to build self-esteem, and to develop respect for others.

WHAT YOU NEED

The project involves 10 severely language delayed special education students, 20 preschool students from a local community organization, and 1 mainstream kindergarten class. Staff include 1 communication specialist/speech pathologist, 1 special education teacher, 1 preschool early childhood specialist, and 1 mainstream early childhood teacher. The science center is equipped with a greenhouse, a plant lab, an incubator, and a brooder.

ADAPTATION TIPS

The project can be adapted for a higher-functioning class by using more advanced literature books. The students could play an active role in reading and retelling the story. They could put on a puppet show for a younger class, too. This would cultivate communication skills and public speaking techniques, and build self-esteem. The science experiments could be upgraded and the students could perform them for a lower-functioning class as well.

WHY IT WORKS

As a result of their involvement in the project, children have demonstrated an understanding of basic life science concepts; simultaneously, their tolerance, sensitivity, and understanding of less typical children has grown as children took on shared goals and responsibilities, explain Ciampa and Mintz. "Miguel, a bilingual developmentally delayed student, typifies the bonds formed among the children. In his enthusiasm and anticipation of the arrival of the other students, he exclaimed 'Yea! I can't wait! When will my friends get here?'"

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Interesting Insects Around Us

HOW IT WORKS
The purpose of this project, ***Interesting Insects Around Us,*** is to increase children's knowledge of and interest in insects and science. Each day children view pictures of insects on the science bulletin board. They get to know insect names and how they are alike and different. After observing and talking about insects, the children choose one to stencil and color. Each child then gets a cricket in a container with a magnifying glass on its lid. Learning centers include materials for the study of insects. The science area contains insect picture cards, an insect lotto game, plastic insects for touching, and insect puppets for creative storytelling. Children write and illustrate their own insect stories in the writing center using blank books, insect stamp pads, and stencils. In the arts and crafts area, the children make insects out of styrofoam balls and pipe cleaners. Math activities include preparing a graph of a favorite insect; the library area offers many books on insects. The project culminates with an exciting trip to the Museum of Natural History

WHO THE STAFF IS
Project disseminator Louise M. Parnell is a teacher at PS 280 in the Bronx. She developed this project to help young children acquire a positive attitude toward science.

WHAT YOU NEED
Basic materials include insect containers and insects (one per child), an ant farm, insect picture cards and posters, an insect lotto game, styrofoam balls, pipe cleaners, plastic eyes, books about insects, and plastic insect souvenirs for each child. Bus transportation to the museum is also necessary.

ADAPTATION TIPS
Upon request, teachers interested in adapting this project can speak with the project disseminator for more detailed information.

WHY IT WORKS
Sharpened observation skills as well as an increased ability to make comparisons and analyze information are two results of this project, Parnell says. "The children's enthusiasm makes me feel that this project is a successful one. The children are happy because they see themselves learning and growing."

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SCREAM--Science Combining Research and Endangered Animal Mural

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HOW IT WORKS

SCREAM combines research into the impact of industrialization and pollution on wildlife with creative arts projects related to various animals and their natural habitats. Children learn about a variety of species and how they adapt to their natural environments; they become aware of how destruction or alteration of natural habitats endangers wildlife; and they devise ways of protecting endangered species. The class is divided into cooperative groups, each of which studies a particular class of species (birds, fish, mammals, reptiles, amphibians). Students in each group select an animal to draw. Once the drawings are complete, they are pasted onto oaktag and cut out to use as a pattern. Using these patterns, the children make fabric animals, which are pasted onto a mural. Students research their animal of choice and engage in many other arts projects related to their area of study. For example, they create "endangered animal tee shirts" with a drawing of their animal printed on the back. In the process, they develop research, writing, and verbal skills.

WHO THE STAFF IS

Project developer Carole Linker teaches at PS 31 in Bayside. She uses art as a catalyst to stimulate students' interest in science and the language arts. She is available to discuss the project with teachers interested in adapting it.

WHAT YOU NEED

SCREAM requires one classroom teacher and, if possible, an art teacher. For younger children a paraprofessional may be used. Basic art materials are paper, markers, crayons, scissors, felt, burlap, glue, and oaktag.

ADAPTATION TIPS

The project can be adapted to suit any grade level. It is a fun and challenging way to develop children's interest not only in endangered animals but in any science, social studies, or language arts project. The three basic components—a mural, a theme tee shirt, and a related research project—may be flexibly applied. Depending on the level of the students, teachers can add or delete items from the research component. For example, as a beginning research skill, a teacher could have younger students use old magazines to find pictures of endangered animals or farm animals.

WHY IT WORKS

"Young children have a natural interest in animals and their care. The fact that the children were eager to learn from each other is one of the most exciting and successful aspects of the project," says Linker. They enjoyed all project activities—creating the mural, animal research, making the tee shirts, and sharing with each other. Not only do they become familiar with research skills and resources, but they develop a positive attitude about learning science. As the mural was being assembled, one student exclaimed: "This is the best science project I ever did!"

Metamorphosis —Not for Butterflys Only

HOW IT WORKS

Metamorphosis—Not for Butterflys Only involves students in the development of a video production based on the life cycle of the butterfly. The process of observing and recording a life cycle in nature motivates students. Students take pleasure in caring for the tiny creatures and in observing how they grow and change. They display fascination and reverance for them from the beginning of growth until they are released on Butterfly Release Day. This interdisciplinary project engages students in scientific observation, mathematics, literature (studying published materials on butterflys), creative dramatics (students' presence and poise on camera), and creative writing (students' response journals and poems). The children especially enjoy viewing themselves on video.

WHO THE STAFF IS

Project disseminator Patricia McGloin is a teacher at PS 164 in Brooklyn. Her background in educational television prompted her to include the video component of her project.

WHAT YOU NEED

Materials for the project are a video camera and tripod, videotape, a butterfly tower, a butterfly garden, mini aquaria, and hand lenses.

ADAPTATION TIPS

Teachers can adapt this project to suit their own teaching styles. Its basic structure will be clear to anyone who views the video production. Copies of the video are available to teachers who want to implement the project.

WHY IT WORKS

"Words such as caterpillar, larva, chrysalis, pupa, and metamorphosis take on a deeper meaning when students witness the reality behind these words," says disseminator Patricia McGloin. "I have found that this particular activity brings out the best in each student—hence the title, *Metamorphosis—Not for Butterflys Only*. A wonderful transformation takes place in each student as he or she enters into this marvelous mystery of nature."

MORE INFORMATION

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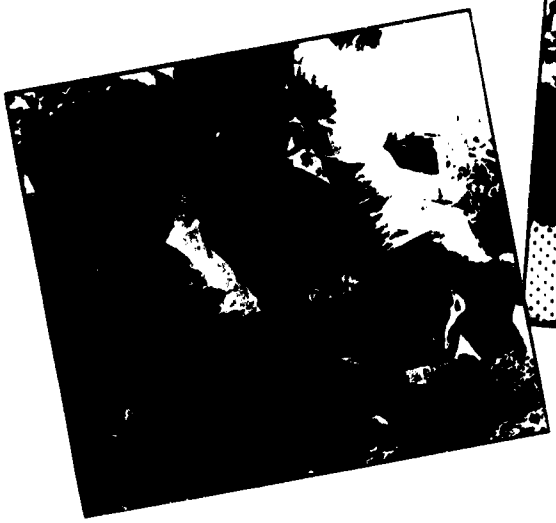
Recycle Today--Enjoy Tomorow



HOW IT WORKS

Recycle Today—Enjoy Tomorrow introduces students to environmental issues and demonstrates the importance of their efforts to generate environmental awareness at the school and community levels. Students work cooperatively in groups to research topics such as the effects of deforestation, global warming, and pollution. They develop the necessary skills for reporting, writing, and decision making. After careful research and planning, students announce their project plans in the school newspaper. They write letters to businesses and government agencies requesting information and assisstance. Other classes and members of the school community are invited to join their efforts. They run a recycling project and recruit students, staff, and parents to get involved in a tree-planting project. They also create an exhibit for display at the New York City Department of Housing Preservation and Development. The school community is encouraged to recycle and students learn that recycling requires both private (individual and business) and public (governmental) action.

WHO THE STAFF IS

A teacher with 18 years of classroom experience, Amanda L. Walton has received grants for various projects from IMPACT II, the American Heart Association, and the American Lung Association.

WHAT YOU NEED

Materials required for the project include plants, fertilizer, hand tools, books on recycling and the environment, poster paper, and art supplies.

ADAPTATION TIPS

Basic instruction can take place in a regular classroom. However, for planting, a plot of land is needed. Upon request, Ms. Walton will help other teachers adapt this project by providing information, resources, and ideas.

WHY IT WORKS

Recycle Today—Enjoy Tomorrow heightens students' awareness of the environment and encourages them to pass their knowledge along to others. "The interdisciplinary approach to teaching is exciting because it provides opportunities for hands-on experiences, decision making, and advocacy," Walton explains.

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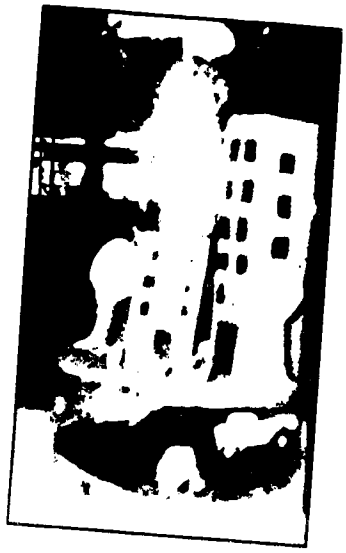

Soda Bottle City in the Year 2000

HOW IT WORKS

Linking several curriculum topics covered in sixth grade science, ***Soda Bottle City in the Year 2000*** encourages students to think about the earth's ecological future. After viewing videos about protecting the environment, studying examples of modern energy-efficient housing, and conducting research on energy sources, students put their new knowledge to work in the construction of miniature model cities in soda bottles. They devise an energy source, modern housing, and a recreation area for their cities. Students enjoy studying Biosphere 2, the self-contained structure with different ecosystems. They research an energy source, submit a written report with a diagram, and participate in a class "town meeting." Presentations on the pros and cons of each proposal are made by students, and the class votes on the best energy source for their town. Mathematics skills are incorporated into this project as students learn to do scale drawings with calculated ratios and proportions. Students complete the projects at home, often with a partner. Parents may get involved by helping students gather and prepare materials.

WHO THE STAFF IS

Science teacher Manette B. Gampel developed this project to encourage her students at IS 201 in Brooklyn to learn critical thinking skills and be motivated to protect the environment *now*.

WHAT YOU NEED

Encourage students to bring in recyclable materials such as: two- or three-liter pre-cut soda bottles (parents cut off the bottoms for safety), cardboard, styrofoam, egg cartons. Other items include: index cards, scissors, glue, Model Magic by Crayola, tape, popsicle sticks, straws, markers, colored pencils, graph paper, rubber bands, and paper clips. (Batteries, wiring, and switching to make models operational are optional.)

ADAPTATION TIPS

Upon request, the project disseminator will discuss the project and show samples of completed work. If any of the students' parents are architects, they can be very helpful in answering students' questions and are often glad to give advice to the class.

WHY IT WORKS

"I believe that this project works because the students are enthusiastic about the work on the project," says project creator Manette B. Gampel. "The finished products reflect creativity and informed choices. When students from other classes see these mini-cities, they too are curious and want to know more about these models."

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Electronic Investigators

MORE INFORMATION
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HOW IT WORKS

The goal of ***Electronic Investigators*** is to engage students in scientific investigation and to introduce them to computer-based research. Many students who have never shown a strong interest in academics have been reached through this project. Working cooperatively in teams, students are given science topics to research and present. The computer is the principal investigative tool for these young scientists. Students use the NYCENET electronic bulletin board to access relevant resources. Among the main databases used by the students is *Grolier's Encyclopedia*. The work of student electronic investigators combines several subject areas: science, math, reading, and computer education. Students use search operations, such as "NOT," "WITH," "AND," and "OR" to search a database for information. By using the computer to formulate research strategies and gather information for their projects, students gain confidence in their capacity to learn and to present information.

WHO THE STAFF IS

Richard De Marie created *Electronic Investigators* to stimulate students' interest in scientific investigation while teaching them the computing skills that they will need in the workplace of the 21st century.

WHAT YOU NEED

Science and computer teachers are involved in this project; collaborative meetings are held weekly to discuss specific science projects that will be assigned to teams of three students. Basic materials are a computer, modem, communication software, printer, and telephone line. Either the Apple or IBM platform can be used.

ADAPTATION TIPS

Although science is the major focus of this project, the team-based research skills developed in this project can be applied to almost any type of project within any set of curriculum areas. For example, science, social studies, and computer teachers may assign teams of students to do a project on New York City. The science teacher might discuss the climate, geography, and wildlife of the city while the social studies teacher discusses its history and culture. The computer teacher would arrange for students to connect with NYCENET and research specific topics.

WHY IT WORKS

Many students do not actively participate in school and simply sit passively in class. When children are working together in group projects, they feel that they are part of the educational process. "Children learn a great deal from each other. Telecomputing allows groups of children to collect and share information and to think critically. In the process, they learn collaboration, teamwork, and social skills," explains De Marie.

HOW IT WORKS

The ***Saving Our Earth: A Call to Action*** curriculum is a collection of 30 lessons that teachers can use to teach students about the environment and what they can do to protect it. The focus of the project is to have students "think globally and act locally." The curriculum is designed to show students how the actions of individuals and societies have harmed natural habitats, what the implications are for both wildlife and humans, and what they can do to get involved in saving our planet. It offers teachers information on environmental hazards along with hands-on activities. These include writing letters to lawmakers advocating stricter environmental protection laws, conducting a water conservation audit based on a student-designed survey, running a school recycling project, and planting trees. Writing activities encourage students to analyze and evaluate controversial environmental policies. Field trips include a visit to McDonald's to learn about the company's corporate policy on use and recycling of materials and a trip to Fresh Kills landfill. As students learn about how everyday decisions and governmental policy affect the environment, and as they correspond with advocacy groups and elected officials on environmental concerns, they gain a sense of responsibility for the fate of the earth and an appreciation of their own capacity to effect change.

WHO THE STAFF IS

Michael J. Blyth has been using the *Saving Our Earth: A Call to Action* curriculum since 1992 in his computer applications and human relations courses at Concord High School. He has developed instructional strategies, a resource list, lesson plans, and a curriculum guide. He is available to share these with interested teachers and to offer consultation on the project.

WHAT YOU NEED

The project is simple to implement; teachers need only review the lessons and follow the outline. A copying machine is necessary to duplicate lessons for students. A list of environmental advocacy groups and other resources is included in the curriculum. Any computer with a word processing project can be used for writing letters and other activities, though this is optional.

ADAPTATION TIPS

Teachers can present lessons to the entire class using an overhead projector and transparencies or can assign lessons for small-group or individual work. Writing activities are designed to enable students to work with a minimal amount of supervision. Teachers can also assign lessons for homework. Lessons can be tailored as needed according to students' needs and learning styles.

WHY IT WORKS

"Through their involvement in the project, students have truly internalized an environmental perspective," says Blyth. "I have observed students picking bottles and cans out of the trash and delivering them to the recycling bin. Students bring in brochures and articles they find on their own to share with me and their classmates. They have come up with original ideas for saving energy and eliminating waste," he says.

MORE INFORMATION

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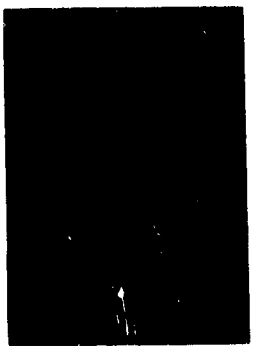
The Environmental Club's School-Wide Recycling Program



MORE INFORMATION
Joy A. Keithline
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HOW IT WORKS
The award-winning ***Environmental Club's School-Wide Recycling Program*** helps students understand the relationship between their daily actions and preserving the environment. The club meets twice a week to discuss issues, view videos on the environment, work on posters, plan activities, or listen to guest ecologists and environmentalists. Fridays are work days and everyone in the club becomes part of the "Green Team," the school's recycling brigade. Students recover materials from the previous week: paper, bottles, and cans. They sort the items and prepare them for sale, refund, or curb-side collection. A "Say No to Plastic" campaign during Earth Week includes the selling of reusable canvas shopping bags. Math, science, art, ecology, and philosophy are integral parts of this project. Through their involvement in the project, students sharpen their communication and socialization skills; as they learn to work together and to accept a variety of personalities, they learn to respect one another.

WHO THE STAFF IS
Joy A. Keithline, a teacher at Seward Park High School in Manhattan, has been involved in her school's recycling efforts since the project began. She became the adviser in 1992.

WHAT YOU NEED
Basic materials include paper bins, can bins, poster paper, paints, and research materials on environmental issues.

ADAPTATION TIPS
Many teachers who are conscious of the need to protect the environment through recycling want to have projects like this one at their schools, but they often don't know how to get started. There are many creative ways to begin, depending on the school and the age of the students. Upon request, Ms. Keithline is available to share information and advice on the project.

WHY IT WORKS
Student attendance is high at club meetings and they always find successful solutions to recycling problems. Students understand the value of recycling, especially in our consumer society. "The project motivates students because the students are self-directed," says Keithline. "There is no hierarchy. The goal is for the individual to discover his or her greatest potential; all students have opportunities to take control in one way or another."

The School-based Weather Station

HOW IT WORKS

The School-based Weather Station is designed to provide bilingual and at-risk students with multidimensional, interactive instruction. It involves 1) a computer-based modem that interacts with national and local forecasting services, 2) a school weather station with a telecommunications link to school computers for providing daily weather reports and long-term forecasting, and 3) a content-based curriculum with lesson plans that provide an instructional base in climatology and related areas. The project meets the requirement for a laboratory science elective and is geared to those students who have not been successful in traditional science classes. Daily activities include generating a computer printout of the local weather report, analyzing data from the school weather station, doing graphic analyses and interpretations of cyclic weather patterns, forecasting short-term and long-term weather, and content-area instruction. Students learn scientific principles and applications as they become proficient in computer skills. Field trips, guest speakers, and career development are incorported into the project. The project's interactive approach to the topic generates enthusiasm among students and challenges them to become actively involved in their own learning.

WHO THE STAFF IS

John Vodicka and Harvey Goodman, teachers at Newtown High School, have presented curriculum development projects in plant care, science research, marine biology, and health careers. They are developing a course outline and extensive lesson plans, which will be available for dissemination to those interested in adapting the project.

WHAT YOU NEED

Materials for *The School-based Weather Station* include Davis instruments (precision weather components), a modem, computers, and related texts and references. One teacher and a supervisor were involved in the project. Regular access to computer facilities is necessary.

ADAPTATION TIPS

Because weather is a constant and changing occurrence, the project offers ample opportunities to integrate material from many disciplines. For example, in social studies, students might examine the relationships between geographic and climatic phenomena. Or, they might examine the impact of weather events on communities (e.g., Hurricane Andrew, the flooding of the northern Mississippi).

WHY IT WORKS

"The topic of weather is inherently interesting to students; they readily involve themselves in projects in which they can immediately apply what they learn," note Vodicka and Goodman. Students are aware that the success of the station depends on them. Their ability to work together as a team and to operate and care for expensive, sophisticated equipment gives students a sense of autonomy and personal achievement.

MORE INFORMATION

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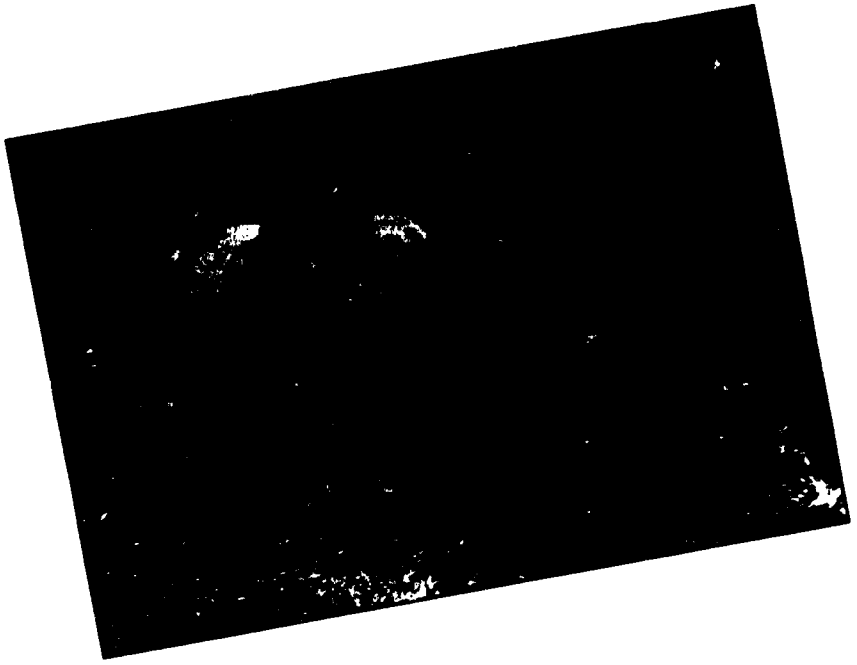
Social Studies

The Community Connection--It Works!



MORE INFORMATION
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HOW IT WORKS

The Community Connection—It Works! is a wonderful connection with the community that can include a planting project with local gardeners, sharing holidays with isolated seniors, and visits by local artists and musicians to the classroom. This project is designed around the community and engages local citizens—parents, merchants, seniors, musicians, artists, firefighters, police officers, waitresses, and many others who live and work near the school—in the education of the community's children.

Learning becomes a first-hand experience as children make trips into the community and link class curriculum with the world around them. Each trip stimulates weeks of exciting lessons in language arts, science, mathematics, music, and art built around a core subject of social studies. A trip to the fish store provides a wide range of activities: children study and then dramatize how fish are brought from the ocean to the fish stores (social studies and creative dramatics), they examine varieties of fish at the store (science), they compare the different fish (mathematics). Children even cook fish (science, mathematics), draw fish murals (art), and sing songs about fish (music). The support of the community helps the children to succeed, and parents and other adults in the community enjoy the opportunity to participate in the process.

WHO THE STAFF IS

Esta Borden, an early childhood teacher working in Manhattan's Lower East Side for several years, uses the resources of the community in her project for early childhood students. Ms. Borden's goal is to connect children with positive role models in their community and to help the children become better citizens

WHAT YOU NEED

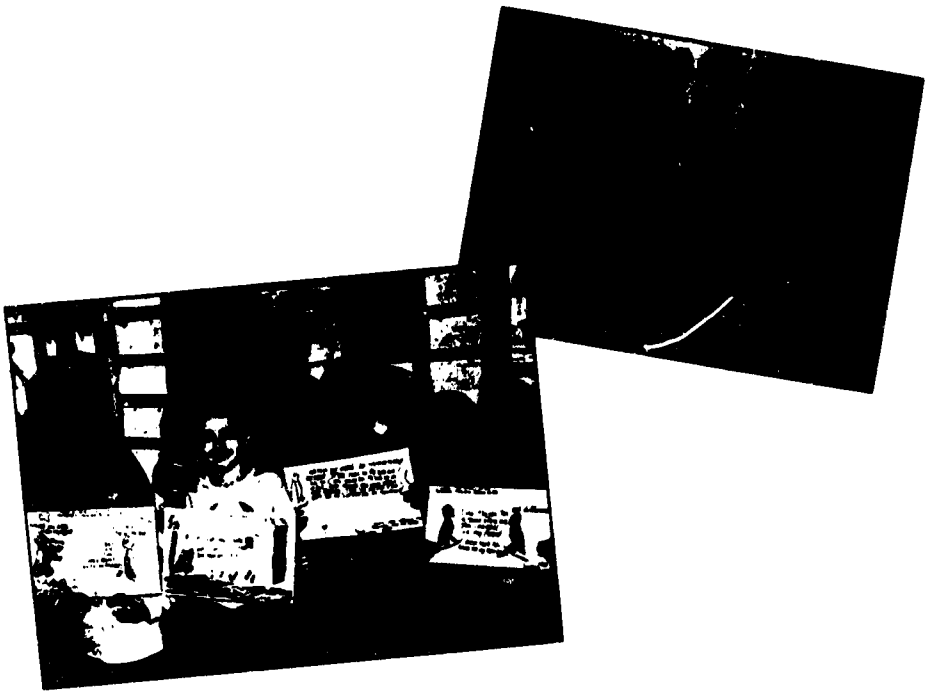
There are no special requirements for this project. General subject area supplies can be used. Many community members are happy to help with special supplies related to a class visit. A camera and film can be used to record trips and activities.

ADAPTATION TIPS

This project demonstrates how wonderful it is when community members participate in the teaching process. It is simple and exciting to involve local professionals, businesses, artists, and agencies year-round in lessons and celebrations. Teachers will see how it is possible to make learning more fun for the children, make teaching easier, and make friends with their school's neighbors all at once. Upon request, the project disseminator will share writings and show an audiovisual presentation about the project.

WHY IT WORKS

"Each school's local community is filled with people with talents, hobbies, and resources that can enrich children's educational experiences," explains Esta Borden. She has seen dispirited children gain confidence, a love of learning, good manners, and trust in the community. The children are motivated because they are recognized and praised by many adults. Children gain an understanding of citizenship through this first-hand learning experience. One mother said that her daughter had become a "learning sponge." A local grocery store owner said it best when he exclaimed, "I love these children and will do anything to help make their lives better. Their lives are our hope and our future."



Birds of Multicolor Feather Can Fly Together

HOW IT WORKS

Using a core curriculum approach, ***Birds of Multicolor Feather Can Fly Together*** infuses global citizenship, mathematics, science, and art into a multicultural literature-based project. Students read multicultural books, conduct research, complete art projects, make books and puppets, role-play, and create plays.

As an arts-based activity, children draw pictures of two parrots, cut out the pictures, and paste them face-to-face onto oaktag paper. They then write dialogue between the birds: "Even though we have different feathers, we can still fly together" and "Our colors are different, but we can still play in the park" are some comments the parrots have made. Parrots in different settings are created with a variety of materials. Children then draw pictures of people of different races talking to each other and add dialogue.

A math worksheet about bird eggs helps children with addition and subtraction, and the study and comparison of the characteristics of parrots (feather colors, beaks, food supply, sounds made, egg laying, and how they fly) engages youngsters in science research. For a social studies activity students study where parrots can be found. For literature activities children take their reading an extra step, and make their own books about parrots.

WHO THE STAFF IS

Sela Zellman developed this project for her students at PS 81 in Ridgewood, Queens. She wanted to encourage children to respect and get along with people of various races and ethnic backgrounds.

WHAT YOU NEED

Materials required include drawing paper, scissors, oaktag, paste or glue, markers and crayons in a wide range of colors, multicultural skin-tone crayons or markers, a variety of multicultural reading materials, and videos of various peoples and their cultures.

ADAPTATION TIPS

Interested educators can directly replicate this project in their classrooms. It is easy to infuse the study of various subject areas into these arts- and literature-based activities to increase students' understanding of various peoples and their cultures.

WHY IT WORKS

Disseminator Sela Zellman states that this project fulfills the need for children to understand how important it is to respect diversity in people. "The students tell me that they understand more about different ethnic groups," says Zellman. "They see that although the colors of the feathers of the birds are all different, the birds are the same underneath. I began to see the students treating each other better in just a short time. The children have expressed that being different is nice. If we were all the same it would be boring."

MORE INFORMATION

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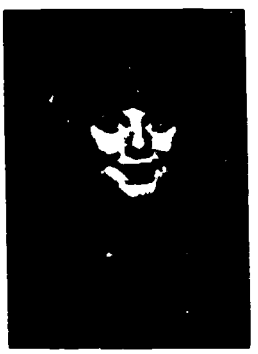
The People in Our Neighborhood



MORE INFORMATION
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HOW IT WORKS

The People in Our Neighborhood project promotes children's awareness of and respect for the members of their community. It incorporates and expands on the learning outcomes of the New York City grade one social studies curriculum, *Living and Working Together in the Community*. The project begins for the children with the exploration of self through dramatic play, music, and communication arts activities. Activities are expanded to include the family as participants and as a resource. As the project progresses, activities include interactions with community members. These interactions build children's confidence, encourage socialization and language development, and help children develop an understanding of the important part everybody plays in the productive functioning of a community.

Activities include walking trips, police and fire safety visits, visiting a laundry, visiting a restaurant and cooking, and post office and mailing experiences. For example, grocery shopping teaches planning, organizing, and the value of money. Store circulars brought back to the classroom are used to develop mathematics skills. All of the activities are reinforced through literature and followed with writing, reading and other communication arts experiences. One of the most motivating and rewarding activities was the preparation and presentation of a musical production developed by school staff, senior volunteers from the Baychester Senior Center, and the children. It was performed by the children at a school assembly, the Baychester Senior Center, and the Laconia Nursing Home.

WHO THE STAFF IS

Bronx early childhood teacher Cheryl Holsborg-Koff began this project in 1988. Her project motivates attendance and translates interdisciplinary concepts into creative learning experiences that promote social and academic success.

WHAT YOU NEED

The following will be used in this project: literature, experience charts, writing journals, puppets and puppet theater, arts and crafts materials, construction paper, community member dolls, records, tapes, musical instruments, food for cooking, bowls and utensils for cooking, materials for costumes and sets, film for recording visits, photocopy and publishing supplies, photographs, poems, illustrations, graph paper and charts, stamps and envelopes, groceries for salads, variety of community helper hats, soap for laundry.

ADAPTATION TIPS

The project can be adapted in its entirety or in part. The activities reinforce concepts from the learning outcomes for all grades. Guidance and administrative staff can refer to the socialization aspects of the project to promote self-esteem, cooperation, and respect for others. Upon request the project disseminator will share ideas, strategies, and materials in a workshop.

WHY IT WORKS

Observable developments are made in speaking, writing, and reading skills, and socialization. Children's reading and writing skills are reinforced through these interdisciplinary activities. Project disseminator Cheryl Holsborg-Koff states, "The anticipation of and participation in walking-trip visits excites the children and motivates questions. The presentations are rewarding. The children develop respect and compassion along with a cooperative attitude toward others."

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ALL SCHOOLS

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