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**ABSTRACT**

During 1985-86 the School Community Education Program (also known as the Umbrella Program), funded by the New York State Legislature, provided a variety of educational and training experiences to some 25,871 participants, including pre-kindergarten children and their parents; and students, teachers and supervisors from kindergarten through grade 12. The program consists of 44 different projects designed to provide innovative solutions to local educational and school problems. The 1985-86 evaluation indicates that in general the program was successful: 36 projects met their stated objectives, and some were highly successful. Of the six projects that did not reach their objectives, five set stringent objective criteria that may have been beyond their grasp. Those projects that failed to meet their stated objective should be closely monitored to identify the reasons for failure. Evaluation reports for each project are presented in four volumes. Each report contains a brief project overview, describes the evaluation methodology, presents the findings, and offers recommendations for improvement. This document, Volume II, presents evaluation reports of the following projects on social, ethnic and environmental studies, and instruction on communication and the arts: (1) Education and Camping Opportunity through Learning Environment (E.C.O.L.E.); (2) Urban Environmental Program for Elementary School Pupils; (3) Snug Harbor Cultural Center--Across Four Bridges; (4) Wave Hill Urban Environmental Program; (5) Refocusing Attitudinal Perspectives (RAP); (6) Goddard-Riverside Environmental Education Program; (7) Ethnic Awareness Program; (8) Oral History Program; (9) Lenox Hill--Environmental Education Program; (10) The Museum Connection. Data are presented on 13 tables. Appendices include copies of program-developed assessment instruments. (BJV)

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SCHOOL COMMUNITY EDUCATION PROGRAM

IN NEW YORK CITY

1985-86

VOLUME II

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Office of Educational Research and Improvement  
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**EVALUATION SECTION REPORT**

**Robert Tobias, Administrator  
John Schoener, Senior Manager**

**July, 1987**

**SCHOOL COMMUNITY EDUCATION PROGRAM**

**IN NEW YORK CITY**

**1985-86**

**VOLUME II**

**Prepared by the O.E.A.  
Instructional Support  
Evaluation Unit**

**Frank Guerrero  
Unit Manager**

**Maria Lagos,  
Evaluation Consultant**

**New York City Board of Education  
Office of Educational Assessment  
Richard Guttenberg, Director**

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## EVALUATION SUMMARY

### BACKGROUND

The School Community Education Program (also known as the Umbrella Program) provides a variety of educational and training experiences to a wide range of participants, including pre-kindergarten children and their parents; and students, teachers, and supervisors at all grade levels from kindergarten through grade 12. The program consists of 44 different projects designed to provide innovative solutions to local educational and school problems. Ten projects provided basic skills, English, and computer literacy instruction; ten focused on social and environmental studies; five were designed for pre-kindergarten children, and the remaining projects provided a variety of educational experiences to participants. Funds were provided by the New York State Legislature to support program activities.

### POPULATION SERVED

During 1985-86, the program served some 24,290 students, the majority of whom were elementary school pupils. In addition, the program served 1,226 teachers and supervisors, 245 pre-schoolers, and about 110 community adults in the 32 community school districts and selected high schools. Each project established different selection criteria for program participation.

### PROGRAM OBJECTIVES

Although program objectives were designed for each specific project and; therefore, were varied, most concerned increasing participants' competence in specific skills and abilities.

### EVALUATION METHODOLOGY

The evaluation of the program was based on a number of data sources: student performance outcomes on project-developed and standardized tests, pupil writing samples, teacher and student survey questionnaires, attendance rates, number of acceptances to special high schools, and review of two curriculum manuals. Pre-program and post-program data were compared to determine mean differences and, when appropriate, correlated t-tests and effect sizes were also computed to establish statistical significance and educational meaningfulness, respectively.

### FINDINGS

The 1985-86 evaluation findings indicate that, in general, the School Community Education Program was successful. Thirty-eight projects met their stated objectives. Three staff development projects (Arts in General Education, Sum in One, and Early Childhood Language and Literacy) and two pre-kindergarten

projects (Brooklyn College Tutorial Center and Pre-School Gifted and Talented) were highly successful. All projects providing instruction in mathematics, writing, English, and computer literacy met their project objectives. In all five pre-kindergarten projects, participants substantially improved their overall performance.

Only six projects did not meet their evaluation objectives. Apart from the Help: Neighborhood Center project that needs extensive project modifications, the other unsuccessful projects set stringent objective criteria which may have been beyond the programs' reasonable grasp.

### RECOMMENDATION

In addition to the recommendations made for each project, the following suggestion is made for the overall improvement of the School Community Education Program:

- . Closely monitor those projects which failed to meet their stated objectives to identify reasons for failure to achieve criterion for success.

### Acknowledgements

The production of this report is the result of a collaborative effort of full-time staff and consultants. In addition to those whose names appear on the cover, Maria Cheung undertook the analysis of the statistical data, and Elias Rosario typed, corrected, and duplicated this report. The unit could not have produced this evaluation without their participation.

## INTRODUCTION

In 1985-86, the New York City Public Schools received \$2,375,000 in funding from the New York State Legislature to operate the School Community Education Program (also known as the Umbrella Program). It consisted of 44 different projects designed to provide innovative solutions to local educational and school programs.

The program provided services to about 25,871 participants in the 32 community school districts and selected high schools. The majority of these participants (24,290) were elementary, intermediate, and high school students. In addition, 245 pre-school children, 1,226 teachers and supervisors, and 110 community adults also participated in the Umbrella Program.

Evaluation reports are presented in four volumes. Volume I contains evaluations for ten projects which provided reading, mathematics, writing, English, and computer literacy instruction to elementary, intermediate, and high school students. Volume II includes evaluations for ten projects on social, ethnic, and environmental studies, and instruction on communication and the arts. Three of these projects also provided staff development training. Volume III contains evaluations of 12 staff development projects. The remaining 12 projects, presented in Volume IV, provided a variety of educational experiences to participants. Five of these projects were designed for pre-kindergarten children, two were concerned with the writing of curricula, one provided parenting skills instruction to students with infants, and the other four projects were designed to improve attendance rates, health, opportunities to gain acceptance to special high schools, and to foster career awareness among students.

Each report contains a brief project overview, describes the evaluation methodology, presents the findings, provides recommendations for improvement, and includes copies of program-developed assessment instruments. The reports are listed in order of budgeted function number in the table of Contents.



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E.C.O.L.E. - EDUCATION AND CAMPING OPPORTUNITY  
THROUGH LEARNING ENVIRONMENT, 1985-86

School-Community Education Program  
Program Administrator: Jack Isaacs  
Project Coordinator: Richard Einbinder

Prepared By:  
Office of Educational Assessment  
New York City Public Schools

PROJECT DESCRIPTION

Project Education and Camping Opportunity Through Learning Environment (E.C.O.L.E.) is a training program in environmental science for elementary school teachers in Community School District (C.S.D.) 19. The project uses the facilities and staff of the William H. Pouch Environmental Center on Staten Island and the Nature's Niche science facility in C.S.D. 19 to provide instruction in environmental science and staff development in teaching science. Teachers and their pupils, in grades four through six, take part in the program's activities.

In 1985-86, 32 teachers and approximately 640 pupils participated in Project E.C.O.L.E. Teachers from eight elementary schools in C.S.D. 19 were selected by their principals on the basis of their need for assistance in science instruction. Teachers and pupils traveled to Camp Pouch every six weeks a total of five times. Camp staff provided instruction in areas such as map reading, first aid, pollution, soil conservation, the life cycle of plants, basic astronomy, and environmental protection. Teachers were assisted in developing instructional units in science that incorporated work in other curriculum areas such

as mathematics and social studies. District science staff developers provided follow-up training in the teachers' classrooms and at the Nature's Niche facility.

The objective for 1985-86 was for teachers to improve their ability to develop and implement lessons in environmental science. Specifically, 75 percent of participants were to show an improvement of at least 75 percent in these skills as measured by their pre- and posttest scores on a project-developed test.

Project E.C.O.L.E. was staffed by a program coordinator, science staff developers, and a school aide paid by C.S.D. 19. Camp Pouch also provided instruction at no cost to the project. Funding of \$30 thousand from the New York State Legislature was used to cover the cost of transportation to Camp Pouch and the purchase of instructional supplies.

#### EVALUATION METHODOLOGY

Project impact was assessed by an analysis of teachers' scores on a project-developed test (see Appendix A). The test combined multiple-choice, short essay, fill-in, true or false, and matching questions to assess knowledge of science concepts. The test was given on a pre- and posttest basis at the beginning and end of the program. The maximum raw score was 50.

#### FINDINGS

Complete test scores were reported for 30 teachers. Mean pretest was 12.1 raw score points (24.2 percent correct); mean

posttest was 16 raw score points (52 percent correct) for a mean gain of 27.8 percent. Table 1 shows the frequency distribution of teachers' gains from pretest to posttest. Most participants (70 percent) achieved gains ranging from 21 to 40 percent and only 3.3 percent of the participants achieved gains higher than 40 percent. Analyzed another way, about 17 percent of the teacher participants correctly answered 70 percent or more test items at posttest (see Table 2).

### CONCLUSIONS AND RECOMMENDATIONS

In 1985-86, Project E.C.O.L.E. was not successful in meeting its stated objective. Only 3.3 percent of participants achieved an improvement of at least 75 percent at posttest. The reason for the project's failure to meet its objective stems from the fact that the quantitative criterion set in the objective was too ambitious. A 75 percent gain (or difference between posttest and pretest) on a 50-item test is almost impossible to achieve even if participants would have performed better than they did at posttest. The low mean posttest raw score (26 raw score points or 52 percentage points) also indicates that the test is either too difficult or it does not reflect project activities. A further problem with the evaluation instrument is that it only measures knowledge of environmental concepts without evaluating the teachers' ability to develop and implement lessons in environmental science.

TABLE 1

Frequency Distribution of Teachers' Gains  
on a Program-Developed Test  
E.C.O.L.E. - Education and Camping Opportunity  
Through Learning Environment, 1985-86

Percent Gain From Pretest to Posttest	N	%
1 - 20%	8	26.7%
21 - 40%	21	70.0
41% or more	1	3.3
TOTAL	30	100.0

- Only 3.3 percent of the participants achieved gains higher than 40 percent.

TABLE 2

Frequency Distribution of Teachers' Posttest  
Percent Scores on a Program-Developed Test  
E.C.O.L.E. - Education and Camping Opportunity  
Through Learning Environment, 1985-86

Posttest Percent Score	N	%
1 - 39%	5	16.7%
40 - 69	20	66.7
70% or more	5	16.7
TOTAL	30	100.0

- About 17 percent of the teachers correctly answered 70 percent or more test items at posttest.

Recommendations based on previous evaluations pointed to similar problems with the testing instrument and suggested that it be revised as well as the project objective. Although project staff acted upon these recommendations, the test needs further revising to better assess the impact of the program. The new instrument should reflect project activities and include appropriate items to measure skills and techniques necessary to develop and implement lessons in environmental science. An alternative and possibly better assessment instrument would be direct observation and evaluation of teacher performance in the classroom measured by a program-developed checklist.

The project objective should also be revised to include a quantitative gain for successful program completion, for instance, "participants will achieve a gain of at least 30 percentage points from pretest to posttest." Finally, a revision of project activities might also be considered so that teachers may obtain greater benefits from their participation in the project.

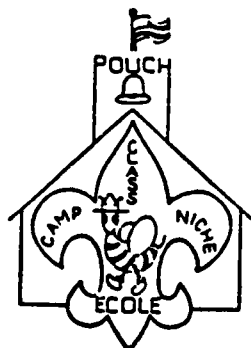
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MATCHING QUESTIONSA

- (1) Puffball
- (2) Staghorn Sumac
- (3) Sassafrass
- (4) Oak Tree
- (5) Poison Ivy
- (6) Amanita
- (7) Beech Tree
- (8) Maple Tree
- (9) Wild rose
- (10) Sweetgum

B

- (A) Its fruit are Acorns.
- (B) Its fruit makes good jelly
- (C) Its a deadly poisonous plant
- (D) It has elusters of 3 shiny leaves
- (E) Its fruit is a samaras
- (F) Its leaves are shaped like mittens
- (G) It's an edible non-green plant
- (H) Its nuts are edible
- (I) Its fruit can be made to make a lemonade type drink
- (J) Its leaves have five points

Draw a line from the numbered items in Column A to the lettered statements in Column B which best describes it.

FILL IN QUESTIONS

1. A map showing the different elevations of the shown land masses is called a \_\_\_\_\_ map.
2. The three major forces of erosion are; mechanical, chemical and \_\_\_\_\_.
3. Two major methods of maintaining fertile farm lands are terracing and \_\_\_\_\_.
4. The five layers of forest growth are called; \_\_\_\_\_, understory, \_\_\_\_\_, \_\_\_\_\_, and the forest floor.
5. The relationship of "Centigrade" to Farenheit" can best be explained by the formula \_\_\_\_\_.
6. The molten material lava which pours out of Volcanos and other ground openings is fine grained because of repeated "cookings" is called an \_\_\_\_\_ rock.
7. A morrain is rock, \_\_\_\_\_, and debris left by glaciers.
8. Skin turning to \_\_\_\_\_ is a symptom of frostbite.
9. First step in first aide is \_\_\_\_\_.
10. The three categories of rocks are: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

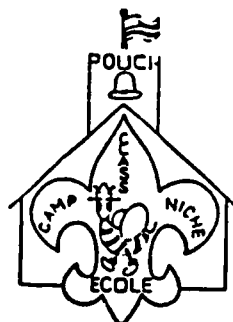


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MULTIPLE CHOICE

- (1) Fungus: (A) a living thing capable of making its own food and having various forms  
 (B) any group of non-green plants that cannot make its own food  
 (C) is green in color and is a source of winter food for animals  
 (D) non-living yet edible in salads  
 (E) All of the above.
- (2) Season changes are caused by: (A) earth's rotation  
 (B) earth's revolution  
 (C) earth's tilt on its axis  
 (D) earth's position in the solar system  
 (E) All of the Above.
- (3) Cirrus clouds usually mean: (A) thin feathery clouds indicating precipitation within 30 hours  
 (B) layered clouds followed by light precipitation  
 (C) thick clouds followed by heavy precipitation  
 (D) puffy clouds indicating fair weather  
 (E) All of the Above.
- (4) Soil: (A) dark colored decayed plant matter  
 (B) another name for earth or dirt  
 (C) rocks and debris left by a glacier  
 (D) consists of weathered rocks and humous  
 (E) All of the Above
- (5) The following represents the Four Basic Food Groups:  
 (A) ice-cream, fruit, vegetable, fish  
 (B) cheese, vegetable, chicken, meat  
 (C) cheese, egg, fruit, cereal  
 (D) fish, bread, egg, fruit  
 (E) All of the Above.

SHORT ANSWERS

- Describe a directional compass, its proper use and how it works.
- Name three types of weathering and briefly explain.
- Identify three different types of environments and briefly describe.
- Pollution may result in the loss of one link in a particular food chain. Give an example, and an activity for children to show that example.
- Evaporation, condensation and precipitation are all parts of the water cycle. Briefly explain and show a diagram.

URBAN ENVIRONMENTAL PROGRAM FOR ELEMENTARY SCHOOL PUPILS, 1985-86

School-Community Education Program  
Program Administrator: Jack Isaacs  
Project Coordinator: John C. Muir

Prepared by:  
Office of Educational Assessment  
New York City Public Schools

PROGRAM DESCRIPTION

The Urban Environmental Program provided instruction on the natural and man-made environment to elementary school students in Community School Districts (C.S.D.s) 15, 17, 18, 20, and 22. Each district designated at least four schools which, in turn, selected at least four classes to participate in the program. C.S.D. 17 selected 21 classes. Teachers' and students' interest in the program was the main criterion for class selection.

About 1,400 elementary school students participated in the program in 1985-86. Instructional activities included an orientation school visit by project teachers, and four two-hour field trips between the months of October and May to Prospect Park in Brooklyn. These field trips combined nature walks and street tours in the nearby neighborhood of Park Slope with follow-up lessons taught at the park's Environmental Center. In addition, teachers offered an in-school environmental program called Neighborhood StreetScapes. District 17 also provided a Built Environment program focusing on urban architecture and urban history, planning, and design. The New York State Legislature contributed \$27 thousand to support this program.

The project objective was for 80 percent of participants to demonstrate an increase in their awareness and appreciation for natural and man-made environments by mastering at least 80 percent of posttest items in program-developed tests.

#### EVALUATION METHODOLOGY

Evaluation activities focused on the analyses of student performance on two different program-developed tests. Form A consists of 18 multiple-choice, and true and false questions on natural and man-made environments. This test was given as a pre- and posttest to students participating in the project in the Spring of 1986 (see Appendix A). Form B, consisting of 15 multiple-choice, and true and false questions on architectural features and materials, was administered as a pre- and posttest to students participating in the program in the Fall of 1985 (see Appendix B). The tests were administered to about ten percent of the participating students. The sample was selected on the basis of volunteer school teachers who agreed to administer the test to their pupils.

#### FINDINGS

Pretest and posttest scores were submitted for 134 students in grades four and five from five elementary schools. Eighty-six fourth-grade pupils took Form A and 48 fifth-graders took Form B of the test. Table 1 shows students' mean raw scores and percent correct responses by grade and school. Mean pretest raw scores

TABLE 1

Students' Mean Raw Scores on a Program-Developed Test,  
by Grade and School  
Urban Environmental Program for Elementary School Pupils,  
1985-86

School	Grade	N	Pretest		Posttest		Mean Gain	Percent Gain
			Raw Score	Percent Correct	Raw Score	Percent Correct		
P.S. 130 <sup>a</sup>	4	27	9.1	50.5%	15.3	85.0%	6.2	34.5%
P.S. 135 <sup>a</sup>	4	27	8.2	45.5	14.4	80.0	6.2	34.5
P.S. 247 <sup>a</sup>	4	32	10.3	57.2	15.9	88.3	5.6	31.1
P.S. 138 <sup>b</sup>	5	25	8.8	58.7	11.7	78.0	2.9	19.3
P.S. 161 <sup>b</sup>	5	23	8.1	54.0	11.6	77.3	3.5	23.3
TOTAL		134						

<sup>a</sup>Perfect Raw Score = 18 (Form A).

<sup>b</sup>Perfect Raw Score = 15 (Form B).

- All grades showed an improvement. Fourth graders correctly answered at least 80 percent of the items at posttest.

by grade ranged from 8.1 to 10.3 points, mean posttest raw scores ranged from 11.7 to 15.9 points and mean gains showed an improvement ranging from 10.3 to 34.5 percent. Apart from one class, grade four at P.S. 135, all students correctly answered more than 40 percent pretest items. At posttest, students who were administered test Form A correctly answered 80 percent of test items and achieved gains above 30 percent. Fifth-grade pupils who took Form B correctly answered less than 80 percent of posttest items and achieved lower gains.

Table 2 shows percentages of students mastering at least 80 percent of test items at posttest by school. Overall, 75.3 percent of participants mastered at least 80 percent of test items at posttest. Grade four students, however, met the project objective since in every class more than 80 percent of participants correctly answered 80 percent of posttest items. In contrast, only 52 and 60.9 percent of fifth-graders at P.S. 138 and 161, respectively, correctly answered 80 percent of test items at posttest.

#### CONCLUSIONS AND RECOMMENDATIONS

Although the Urban Environmental Program for Elementary School Pupils did not achieve its stated objective, 75.3 percent of participants mastered at least 80 percent of posttest items. This indicates that the program had an impact on student performance as a large percentage of pupils increased their awareness and knowledge of the environment. Furthermore, 87.9 percent of

TABLE 2

Percent of Students Scoring at Least 80 Percent  
At Posttest on a Program-Developed Test  
Urban Environmental Program for Elementary School Pupils,  
1985-86

School	Grade	Total Number of Students	Percent of Students Achieving Project Objective <sup>a</sup>
130	4	27	85.2
135	4	27	81.5
247	4	32	96.9
138	5	25	52.0
161	5	23	60.9
TOTAL		134	75.3

<sup>a</sup>Project objective: 80 percent of participants will demonstrate an improvement by mastering at least 80 percent of test items at posttest.

- Grade four participants met the project objective.

fourth graders who took Form A of the program-developed test, met the program objective.

In contrast, fifth graders, who took Form B of the test, did not meet the program objective. The lower mean gains they achieved may be attributed to a ceiling effect; these students' mean pretest scores were relatively high. This form of the test seems to be too easy since students knew more than 50 percent of the answers at pretest. The test should be revised, eliminating those items most pupils know prior to their participation in the program, and adding new and more difficult items. In addition, the program objective could establish a quantitative gain of at least 30 percent from pretest to posttest to measure successful program completion. Finally, the evaluation of the program could be improved if a random sample of 50 percent of students in each participating school were tested.

# Prospect Park Environmental Center

The Picnic House  
Prospect Park  
Brooklyn, N.Y. 11215  
718-788-8500



SCHOOL: \_\_\_\_\_

NAME: \_\_\_\_\_, \_\_\_\_\_  
Last First

## URBAN ENVIRONMENT PROGRAM FOR ELEMENTARY SCHOOL STUDENTS (WINTER)

### PRE-TEST - POST-TEST

QUESTIONS 1-10 CIRCLE: TRUE (T), FALSE (F), OR UNCERTAIN (U)

- T F U 1. The skin of a tree is called its bark.
- T F U 2. Prospect Park is planted with only one kind of tree.
- T F U 3. A landscape usually has trees, grass and soil.
- T F U 4. A landscape architect usually designs buildings.
- T F U 5. City parks are designed.
- T F U 6. Most animals and plants do not depend on other living things to meet their needs for food and shelter.
- T F U 7. A root is the part of the plant that has buds at the tip, and later has flowers and leaves.
- T F U 8. An open-grass area in the park is called a meadow.
- T F U 9. When winter comes most trees end their life processes and die.
- T F U 10. The starling is a bird that lives in Prospect Park all year round.

QUESTIONS 11-18 WRITE THE CORRECT LETTER IN THE SPACE ON THE LEFT

- \_\_\_\_\_ 11. Soil is made of: (a) rocks (b) leaves (c) roots (d) all of these.
- \_\_\_\_\_ 12. Prospect Park was built (a) 1,000 years ago (b) about 100 years ago  
(c) about 20 years ago
- \_\_\_\_\_ 13. Seasonal changes influence the lives of (a) tiny green plants (b) ever-green trees (c) squirrels and birds (d) all of these
- \_\_\_\_\_ 14. Squirrels usually (a) live in the park all year long (b) depend on trees, nuts and seeds for food (c) make their nests in or on trees (d) all of these
- \_\_\_\_\_ 15. In order for trees to produce new young, they make (a) soil (b) trees rings (c) seeds
- \_\_\_\_\_ 16. The reason why parks are built is (a) to have playgrounds (b) to have a place to play ball (c) to enjoy a quiet, green space (d) all of these
- \_\_\_\_\_ 17. Who should keep the park clean? (a) park workers (b) senior citizens (c) people who have picnics (d) all of these
- \_\_\_\_\_ 18. Trees are important because (a) they make the air better to breathe (b) they are pleasant to look at (c) they are home for other living things (d) all of these.



# Prospect Park Environmental Center

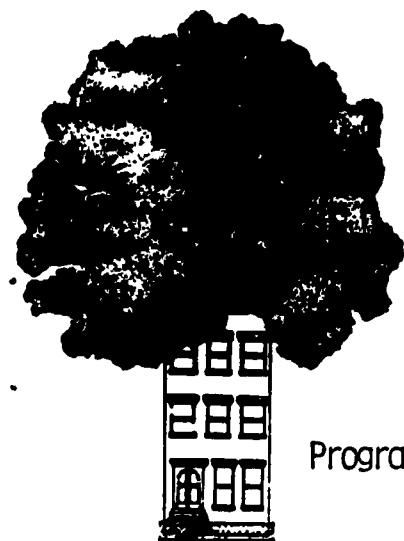
The Picnic House  
Prospect Park  
Brooklyn, N.Y. 11215  
212-788-8500

PRE-TEST POST-TEST (WINTER MONTHS)

SCHOOL: \_\_\_\_\_ CLASS: \_\_\_\_\_

NAME: \_\_\_\_\_  
Last First

Program Title: Urban Environment Program for Elementary  
School Students (Winter 1985-86)



Ques. 1-10: Circle True (T), False (F) or Uncertain (U).

- T F U 1. All streetscapes have shapes, colors, patterns and textures.
- T F U 2. A pattern is a design that repeats and repeats.
- T F U 3. Houses, buildings and city streets are designed.
- T F U 4. A bracket is a stone found at the bottom of a building, with the construction date carved on it.
- T F U 5. A facade is the front of a building.
- T F U 6. Dentils are square "tooth-like" pieces found on many older buildings.
- T F U 7. Brownstone and limestone are examples of cast iron.
- T F U 8. Building ornaments are usually designed to look like natural objects.
- T F U 9. A bay is a flat surface found on building fronts.
- T F U 10. A cornice is the topmost part of a building front; it projects out, and is usually decorated.

Ques. 11-15: Write the correct letter in the space on the left.

- \_\_\_\_\_ 11. Pebbly, scratchy, and rough are good examples of:  
A) colors B) shapes C) textures
- \_\_\_\_\_ 12. Something that is composed of sand, created within the earth, and can be cut into beautiful building facades, is called  
A) brick B) wood C) brownstone
- \_\_\_\_\_ 13. A tall, round structure that helps to support a building is a  
A) shingle B) column C) stoop
- \_\_\_\_\_ 14. Repeated, striped, and checked are good words for kinds of  
A) colors B) shape C) patterns
- \_\_\_\_\_ 15. An arch shape A) has a triangle at the top B) is flat on top  
C) looks like an upsidedown letter "U"

SNUG HARBOR CULTURAL CENTER - ACROSS FOUR BRIDGES, 1985-86

School-Community Education Program  
Program Administrator: Jack Isaacs  
Project Coordinator: Grace Lamb

Prepared By:  
Office of Educational Assessment  
New York City Public Schools

PROJECT DESCRIPTION

The Across Four Bridges Project at Snug Harbor Cultural Center on Staten Island provided 471 students, in grades three through eight, with a program of instruction about the history and importance of New York's harbor. Pupils attended classes at the center one day a week for 25 weeks from December through June, traveling from schools in Community School Districts (C.S.D.s) 20, 22 and 31 in Staten Island and Brooklyn. Classes were selected by school principals, teachers and the project director.

Snug Harbor Cultural Center is an 80-acre historic landmark on the waterfront with several buildings which formerly served as a retirement home for sailors. Project activities there stressed the development of reading and writing skills based on the study of such subjects as the social and economic history of the Port of New York, geology, shipping, whaling, and immigration.

Students were instructed by regular classroom teachers who participated in workshops and curriculum development sessions prior to and during the program. Snug Harbor Cultural Center staff included a project director and an office aide. The New

York State Legislature contributed \$44 thousand to cover the cost of personnel services, the use of the center's facilities, and pupil transportation.

### EVALUATION METHODOLOGY

Evaluation activities focused on the analysis of student performance on a program-developed test designed to measure knowledge on the social and economic history of New York harbor. The test, consisting of multiple-choice and fill-in questions, was administered as both a pretest and posttest in November 1985 and May 1986, respectively. Perfect raw score on the test was 30 points (see Appendix A).

### FINDINGS

Complete test scores were submitted for 431 students in grades three through eight (see Table 1). More than half of these students were fourth graders while only eight eighth-grade pupils participated in the program. Overall, students achieved a mean gain of 6.4 points or 21.6 percent correct responses. Pupils in all grades achieved gains from pretest to posttest ranging from 3.7 to 10.5 raw score points. Pretest raw scores ranged from 13.2 to 20.2 raw score points (16 overall mean raw score or 53.5 percent correct responses); posttest raw scores ranged from 23.9 to 25 raw score points (22.5 overall mean raw score or 75.1 percent correct responses). Third, fourth and fifth graders made the lowest scores at pretest but achieved the

TABLE 1

Students' Mean Raw Scores<sup>a</sup> on a Program-Developed Test, by Grade  
Snug Harbor Cultural Center, 1985-86

Grade	N	Pretest		Posttest		Gain	
		Raw Score	Percent Correct	Raw Score	Percent Correct	Raw	Percent
3	66	13.2	44.0%	23.7	79.0%	10.5	35.0%
4	245	13.5	45.0	21.0	70.0	7.5	25.0
5	55	14.4	48.0	21.0	70.0	6.6	22.0
6	28	16.9	56.3	20.6	68.7	3.7	12.4
7	29	20.2	67.3	25.0	83.3	4.8	16.0
8	8	18.2	60.7	23.9	79.7	5.7	19.0
TOTAL	431	16.1	53.5	22.5	75.1	6.4	21.6

<sup>a</sup>Perfect Raw Score = 30.

- Pupils in all grades achieved gains from pretest to posttest.

highest percent gains. In contrast, students in grades six through eight correctly answered more than 55 percent items at pretest but they achieved the lowest gains.

#### CONCLUSIONS AND RECOMMENDATIONS

The Across Four Bridges Project was successful in meeting its objective. Pupils in all grades achieved gains, thus, demonstrating that they increased their awareness and understanding of maritime history and its importance to the history of New York. This finding, however, should be taken with caution. Students in grades six through eight knew more than 55 percent of the test questions prior to their participation in the program, indicating that the test might be too easy for them. The test should not be revised since it adequately measures project impact on students in lower grades for whom it was specifically designed. A different test should be designed for grade six through eight students. In the future, project staff should also consider including a quantitative criterion for project success. For example, the following sentence could be added to the program objective: 80 percent of participants will achieve a gain of at least 30 percent.

REVISED EVALUATION INSTRUMENT

ACROSS FOUR BRIDGES  
 SNUG HARBOR CULTURAL CENTER  
 NEW YORK MARITIME HISTORY PROGRAM

PRE- AND POST-TEST  
 1985

Answer as many questions as you can. Thank you.

Name \_\_\_\_\_  
 Class \_\_\_\_\_

School \_\_\_\_\_  
 Date \_\_\_\_\_

Use the following list of words to fill in the blanks below.

STEERAGE	LARGEST	IMMIGRANTS	TO WEEKS	BETTER LIFE
PACKET	NEW YORK	ELLIS ISLAND	STEAM	U.S. CUSTOMS

- The people who came to this country in the early 20th century were called \_\_\_\_\_. They came here to find a \_\_\_\_\_. The first ships to cross the ocean were called \_\_\_\_\_ ships but later, faster, and better \_\_\_\_\_ ships made the journey in \_\_\_\_\_. The first class passengers were examined by the \_\_\_\_\_ while still on board ship, but those in \_\_\_\_\_ had to go to \_\_\_\_\_. So many people came that \_\_\_\_\_ became a great and busy harbor and, in time, became the \_\_\_\_\_ city of the world.
- New York played a large role in sending troops to Europe. In fact, New York was the main port from which soldiers embarked. Embarked in this sentence means:
  - \_\_\_\_\_ left port
  - \_\_\_\_\_ wooden ships
  - \_\_\_\_\_ returned to port
- Why did it take longer to go from England to New York (West) than it did to return to England (East)?
  - \_\_\_\_\_ (a) The ships coming to New York were loaded with heavy products and cargo
  - \_\_\_\_\_ (b) The maps used for sailing east were more accurate
  - \_\_\_\_\_ (c) The ships were sailing against the wind and the ocean currents
- Which three of the following cities were more important ports than New York before the Civil War:
  - \_\_\_\_\_ Boston
  - \_\_\_\_\_ Los Angeles
  - \_\_\_\_\_ Charleston
  - \_\_\_\_\_ Philadelphia
  - \_\_\_\_\_ Chicago

5. Exporting of goods means:
- (a) shipping goods out of the country
  - (b) shipping goods into the country
  - (c) shipping goods on the Erie Canal
6. Containerization can be described as a:
- (a) cheaper method of loading and unloading goods
  - (b) safer method
  - (c) faster method
  - (d) all of the above
7. The most important difference between packet ships and other sailing ships of the day was that they could:
- a.  carry passengers
  - b.  maintain a regularly scheduled run
  - c.  cross the seas
8. What was one important reason for the British losing the Revolutionary War?
- (a) The Americans stopped them from getting timber for the masts of ships
  - (b) British sailors were not well trained
  - (c) Most British soldiers did not like to fight
9. New York Harbor has changed because of:
- (a) containerships
  - (b) the building of the St. Lawrence Seaway
  - (c) the use of cargo-carrying airplanes
  - (d) all of the above
10. New York Harbor:
- a.  Is often closed by ice in the winter.
  - b.  Is a well-protected, land-locked port.
  - c.  Is at the mouth of the Delaware River.
11. A shipyard on the East River that built many ships for the United States Navy was the:
- (a) Manhattan Navy Yard
  - (b) Brooklyn Navy Yard
  - (c) Elizabeth Navy Yard
12. Sailors Snug Harbor was founded in 1801 by Robert Richard Randall to:
- a.  Train men to become sailors.
  - b.  House the families of sailors.
  - c.  House "aged, decrepit, and worn-out sailors".

13. Name three kinds of ships used by whalers prior to 1900:
- a. \_\_\_\_\_ Frigates      c. \_\_\_\_\_ Sloops      e. \_\_\_\_\_ Schooners  
 b. \_\_\_\_\_ Viking ships      d. \_\_\_\_\_ Ocean liners
14. The Portuguese, in the 15th century, built a new type of ship that was able to sail along the coasts as well as across the ocean. This type of ship was called a:
- a. \_\_\_\_\_ Frigate      b. \_\_\_\_\_ Caravel      c. \_\_\_\_\_ Steamboat
15. The beaver, a symbol in the great seal of New York State, stands for:
- a. \_\_\_\_\_ the large number of streams and dams in the State  
 b. \_\_\_\_\_ the fur trade  
 c. \_\_\_\_\_ man's best friend
16. The most important difference between packet ships and other sailing ships of the day was that they could:
- a. \_\_\_\_\_ carry passengers  
 b. \_\_\_\_\_ maintain a regularly scheduled run  
 c. \_\_\_\_\_ cross the seas
17. How did the Erie Canal help New York City?
- \_\_\_\_\_ (a) Shipping could move from the Great Lakes to the Hudson River with many products from the West.  
 \_\_\_\_\_ (b) Supplied New York City with fresh water  
 \_\_\_\_\_ (c) It connected the Atlantic with the Pacific Ocean



WAVE HILL URBAN ENVIRONMENTAL PROGRAM, 1985-86

School-Community Education Program  
Program Administrator: Jack Isaacs  
Project Coordinator: Talbert Spence

Prepared By:  
Office of Educational Assessment  
New York City Public Schools

PROJECT DESCRIPTION

The Wave Hill Urban Environmental Program is a training project in urban environmental science for elementary and junior high school teachers in Community School Districts (C.S.D.s) 9 and 10. The goal of the project is for teachers to gain confidence in their teaching of science and for pupils to view science as a living subject.

In 1985-86, 24 teachers, 12 each from C.S.D. 9 and 10 participated in the project. Schools and teachers were recommended for project participation by district superintendents and school principals. Teachers and their pupils visited the Wave Hill Environmental Center for workshops and training in areas such as local geology, botany, and mapping. They also participated in workshops in the field designed to help them make use of urban scientific resources. Wave Hill staff supplemented these activities with visits to participating classes where they also assisted teachers in planning lessons and implementing in-class projects.

The objective for 1985-86 was for teachers to demonstrate an increase in science instruction skills as measured by their performance on a project-developed test of scientific knowledge.

The project received \$12 thousand in funding from the New York State Legislature.

### EVALUATION METHODOLOGY

Project impact was assessed by an analysis of teachers' scores on a project-developed test of scientific knowledge given at the beginning and end of the project (Appendix A). The test included multiple-choice items, identifications, matching columns, and short essays. The posttest included a third part related to the specific topics covered during the training sessions and field trips. Teachers who studied different topics were required to take one of the sections covering these areas.

### FINDINGS

Pretest and posttest data were reported for 50 teacher participants. Table 1 shows mean raw scores and gains by district. Overall pretest mean raw score was 8.2 points (40.8 percent correct responses), posttest mean raw score was 17.5 points (87.5 percent correct), for a gain of 46.7 percent. C.S.D. 9 participants made the lowest pretest raw score but achieved the highest posttest score and percentage gain.

### CONCLUSIONS AND RECOMMENDATIONS

The Wave Hill Urban Environment Project achieved its objective of improving teacher performance on the project-

TABLE 1

Teachers' Mean Raw Scores<sup>a</sup> on a Program-Developed Test  
by District  
Wave Hill Urban Environmental Program, 1985-86

District	N	Pretest		Posttest		Gain	
		Raw Score	Percent Correct	Raw Score	Percent Correct	Raw	Percent
9	3	7.0	35.0%	17.8	89.0%	10.8	54.0%
10	7	9.3	46.5	17.2	86.0	7.9	39.5
TOTAL	10	8.2	40.8	17.5	87.5	9.3	46.7

<sup>a</sup>Perfect Raw Score = 20.

- Overall mean gain was 9.3 points or about 46 percent points.

developed test. Teachers from both districts made gains above 40 percent. In spite of this positive finding, there remain some problems with the evaluation instrument. First, it measures the increase in teachers' factual knowledge about the environment while the program objective is for participants to demonstrate an increase in science instruction skills. Questions about how to incorporate their increased knowledge into the classroom, such as methodology, should be added to the testing instrument. Secondly, it would be better if only one test would be given as a pretest and posttest. The present instrument, consisting of two different forms, raises the question whether pretest and posttest scores can be meaningfully compared. Finally, the objective should be expanded to designate specific quantitative criteria for successful program completion. A sentence stating: "80 percent of participants will achieve a gain of at least 30 percent" should be added to the program objective.

When the well's dry,  
we know the worth of water. -- Benjamin Franklin

1. The average American drinks \_\_\_\_\_ quarts of water each day.
  - A. 80
  - B. 3,000,000
2. We use \_\_\_\_\_ gallons of water for each 5 minute shower.
  - C. 1.5 - 5
3. Each time you flush the toilet, you contribute \_\_\_\_\_ gallons to your local sewage plant.
  - D. 578
  - E. 75
4. We each account for \_\_\_\_\_ gallons of sewage each day.
  - F. 320
5. NYC has \_\_\_\_\_ operating sewage treatment plants, \_\_\_\_\_ under construction, and \_\_\_\_\_ % of its sewage now treated.
  - G. 200,000,000
  - H. 7
6. NYC's drinking water is imported via aqueducts from over \_\_\_\_\_ miles away.
  - I. 18,000,000,000
  - J. 3
7. NYC has \_\_\_\_\_ miles of shoreline, \_\_\_\_\_ miles of piers and bulkheads, and \_\_\_\_\_ miles of developed beaches.
  - K. 100
  - L. 4 - 7
8. A wastewater treatment plant in NYC can cost as much as \_\_\_\_\_ and treat as much as \_\_\_\_\_ gallons per day.
  - M. 17
  - N. 1,400,000,000
9. NYC treats \_\_\_\_\_ gallons of wastewater each day, enough to fill the new Yankee Stadium \_\_\_\_\_ times.
  - O. 15 - 20
  - P. 22,000
10. There are \_\_\_\_\_ miles of streams in the U.S.
  - Q. 14
11. There are \_\_\_\_\_ municipal water supply systems in the country.
  - R. 125
12. U.S. EPA pays \_\_\_\_\_ % of the total cost of a swage treatment system.
  - S. 70,000,000
13. U.S. EPA is in the process of spending over \_\_\_\_\_ dollars to clean up our nation's wastewater.

afterthought: Why are manhole covers round?

TEACHER INSTITUTE

Wave Hill  
Department of Education

Pre-Quiz

1. What plant do monarch caterpillars feed on?
2. What is potable water?
3. How many years do dandelion plants live (if not eliminated by unnatural causes.)
4. What are the four elements that are found in all proteins?
5. What is the northernmost point at which the sun's rays strike the earth directly on the first day of summer?
6. What is an annual (botanically speaking?)
7. What are the two basic components of soil?
8. What is a monoecious plant?
9. How were Indian canoes in this part of the country made?
10. Define Chlorophyll.
11. BONUS - When many Eastern Amerindians spoke of the 3 sisters, what did they mean?
12. Define Melanin
13. What are the 3 types of rocks?
14. How many centimeters long is this page? How many inches wide?
15. Name a dioecious tree.

NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

PRACTICUM QUIZ

1. Of the ten (10) plants displayed which one is important in the Monarch caterpillars life cycle?
- 2.
3. How many years do dandelion plants live (if not eliminated by unnatural cause.
4. Find 5 (five) examples of monoecious plants from the grouping provided.
5. Give three characteristics of an insect.
6. Name an insect with no metamorphosis.
7. Find and collect leaves from four trees with opposite arrangements and four with alternate arrangements and key out their genus and species.
8. What is the northern most point at which the sun's rays strike the earth directly on the first day of summer?
9. What are the two basic components of soil?
10. Define Chlorophyll.
11. New York City has how many operating sewage treatment plants in operation today?
12. The average American drinks how many quarts of water each day?
13. How were Indian canoes in the eastern part of the country made?
14. When many Eastern Amerindians spoke of the 3 sisters, what did they mean?
15. Define Melanin
16. What are the 3 types of rocks?
17. Choose from the rock samples the three major bedrocks of New York City
18. What is the dominant rock of the Bronx? How was it formed and name one mineral that is visible in this rock.
19. Name the smallest flowering plant and one parasitic flowering plant.
20. List three factors that contribute to the environmental quality of a fresh water pond.
21. BONUS How many centimeters long is this page? how many inches wide?

REFOCUSING ATTITUDINAL PERSPECTIVES (RAP), 1985-86

School-Community Education Program  
Program Administrator: Jack Isaacs  
Project Coordinator: Burt Schuman

Prepared By:  
Office of Educational Assessment  
New York City Public Schools

PROJECT DESCRIPTION

The Refocusing Attitudinal Perspectives Program provides teachers and students from Community School District (C.S.D.) 27 and from selected high schools with training workshops on social, ethnic, and religious differences. Since misconceptions and fears arising from these differences often generate intergroup friction and conflict in school, the program seeks to increase teacher and student multicultural awareness, and promote a better understanding and cooperation among students.

In 1985-86, five high schools and two middle schools agreed to participate in the program. Participants were selected by school principals among ethnically and racially representative teachers and students who demonstrated an interest in the program and ability to improve the school intergroup relations. Teacher and student participants attended school-based training workshops conducted by facilitators from the Panel of Americans, a private organization with expertise in human relations and ethnic awareness training. The Panel of Americans also supplied instructional materials and films. After a 20-week training



period, teachers stimulated discussions in the school through classroom presentations and workshops.

The program objective was for participants to have a more positive understanding of religious and ethnic differences, and an improved understanding of how a negative view of these differences contributes to stereotyping, prejudice, and discrimination. More specifically, the objective was for 80 percent of participants to show an increase at posttest of at least 20 percent over their pretest scores. These changes were measured by program-developed surveys. The project received \$45 thousand from the New York State Legislature.

#### EVALUATION METHODOLOGY

Evaluation activities focused on two areas. First, assessment of teacher response to the training workshops which was measured by an eight-item survey distributed at the end of the training period (see Appendix A). Teachers were asked to rate their satisfaction with participation in the program with four statements on a four-point scale from "no" to "considerably." The highest score possible was 32 points. Second, to assess the impact of the program on students' perception of racial, ethnic, and religious differences and improved awareness. This objective was measured by a 25-item survey administered at the beginning and end of the program (see Appendix B). Survey items included a five-point rating scale for responses ranging from "strongly agree" to "strongly disagree." The highest score was 125 points.

## FINDINGS

### Teacher Surveys

Overall ratings for 12 teachers were submitted for evaluation. The survey employed a four-point scale for responses with a rating of eight for the least positive to a rating of 32 for the most positive. Mean teacher rating was 21.4 points, indicating that teachers were "moderately" satisfied with the program. This rating ranged from 15 points (lowest evaluation rating) to 27 points (highest evaluation rating).

### Student Surveys

Total survey outcomes for 156 students were received for analysis. Table 1 presents students' mean ratings by school. Overall pre-program mean rating was 96.1 points; mean posttest rating was 99.9 points, with a gain of 3.8 points or three percent increase. In general, students' mean pre-program ratings by school were similar for all schools except for students at John Bowne High School who presented the highest pre-program rating. There was, however, considerable variation in students' individual ratings which ranged from 39 to 124 points at pretest and from 57 to 125 points at posttest. Post-program mean ratings did not increase much except for students at Martin Van Buren High School who achieved the highest increase (9.2 points). Pupils at Flushing High School achieved a negative gain.

TABLE 1

Students' Mean Ratings<sup>a</sup> on a Project-Developed Survey, by School  
Refocusing Attitudinal Perspectives (RAP), 1985-86

School	N	Pretest		Posttest		Gain	%
		Rating	% Perfect Rating	Rating	% Perfect Rating		
John Bowne H.S.	27	100.4	80.3%	102.6	82.1%	2.2	1.8%
Flushing H.S.	75	94.9	75.9	94.6	75.7	-.3	-.2
A. Lincoln H.S.	18	94.8	75.8	98.7	79.0	3.9	3.2
M. Van Buren H.S.	36	94.4	75.5	103.6	82.9	9.2	7.4
TOTAL	156	96.1	76.9	99.9	79.9	3.8	3.0

<sup>a</sup>Perfect Rating = 125

- Students' overall mean ratings were similar at pretest and posttest, showing a mean increase of three percent.

Table 2 shows the percentage of students who met the project-set criterion by school. Only 3.8 percent of student participants showed an increase of at least 20 percent at posttest over their pretest scores.

#### CONCLUSIONS AND RECOMMENDATIONS

The evaluation findings indicate that the Refocusing Attitudinal Perspectives (RAP) Program did not meet its objective in 1985-86. Only 3.8 percent of pupil participants met the project objective, achieving a gain of at least 20 percent at posttest. It is not surprising that such a low percentage of students met the program objective because pre-program mean ratings were large (overall mean 96.1 points), indicating that the survey was probably too easy for most pupils. But the fact that post-program mean ratings were about the same as pre-program ratings (except for students in M. Van Buren High School who achieved a gain of about nine points) also indicates that participation in the project did not increase students' prior knowledge or improved their prior attitudes. In view of these problems, the survey should be revised, eliminating those questions that most students know at the beginning of the program. The survey should also reflect project activities. A multiple-choice test would, however, be a more adequate instrument to assess the program's impact on student performance.

The impact of the program on teacher performance could not be adequately evaluated with the instrument administered to them.

TABLE 2

Percentage of Students Meeting Project-Set Criterion<sup>a</sup>  
 Refocusing Attitudinal Perspectives (RAP), 1985-86

School	N	Meeting Criterion	
		N	%
J. Bowne H.S.	27	2	7.4%
Flushing H.S.	75	2	2.7
A. Lincoln H.S.	18	0	0.0
M. Van Buren H.S	36	2	5.5
TOTAL	156	6	3.8

<sup>a</sup>Posttest scores of 80 percent of participants will show an increase of at least 20 percent over their pretest scores.

- Only 3.8 percent of participants met the project-set criterion.

The program objective was stated in terms of improved knowledge but the teacher survey measured satisfaction with the program. This survey may be an adequate index of program effectiveness but the objective for this component would then need to be restated. It could be replaced with the following objective, for instance, "the program will receive a mean rating of at least 20 points from teacher participants." It would also be helpful if the staff sent the completed teacher surveys rather than total ratings so that it would be possible to determine which aspects of the program received higher or lower ratings.

APPENDIX A  
TEACHER SURVEY

Name \_\_\_\_\_

School \_\_\_\_\_

Position \_\_\_\_\_

1. Would you say that you have gained new insight into how to work with students of different racial and ethnic backgrounds?  
Considerably \_\_\_ Moderately \_\_\_ Slightly \_\_\_ No \_\_\_
2. Is the program helpful in offering classroom strategies that enhance your student's appreciation of ethnic diversity?  
Considerably \_\_\_ Moderately \_\_\_ Slightly \_\_\_ No \_\_\_
3. Can you see the program being helpful in improving human relations in the classroom?  
Considerably \_\_\_ Moderately \_\_\_ Slightly \_\_\_ No \_\_\_
4. As a result of the training, do you as a teacher view this notion of "difference" as a legitimate area for classroom exploration?  
Considerably \_\_\_ Moderately \_\_\_ Slightly \_\_\_ No \_\_\_
5. Do you feel that other teachers could benefit from these workshops?  
Considerably \_\_\_ Moderately \_\_\_ Slightly \_\_\_ No \_\_\_
6. As a result of this training would you feel comfortable in the role of moderator?  
Considerably \_\_\_ Moderately \_\_\_ Slightly \_\_\_ No \_\_\_
7. As a result of this training would you feel comfortable conducting a new training cycle?  
Considerably \_\_\_ Moderately \_\_\_ Slightly \_\_\_ No \_\_\_
8. Do you feel that these workshops would be beneficial for other teachers?  
Considerably \_\_\_ Moderately \_\_\_ Slightly \_\_\_ No \_\_\_

If you have any comments you would like to make regarding the RAP program please feel free to do so below:

APPENDIX B  
REFOCUSING ATTITUDINAL PERSPECTIVES (RAP)

63425

STUDENT TEST

Name \_\_\_\_\_

School \_\_\_\_\_

Grade \_\_\_\_\_

Date \_\_\_\_\_

1. People who belong to the same ethnic group are all alike.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
2. Stereotypes give us accurate information about people of an ethnic group.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
3. Stereotypes are not harmful.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
4. Positive stereotypes are an asset to a group.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
5. People of different ethnic backgrounds would get along better if they stopped holding on to their customs and beliefs.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
6. People should socialize and live with people of their own backgrounds.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
7. I have nothing in common with people of other ethnic backgrounds.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
8. If we ignore prejudice it will go away.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
9. Discrimination does not exist today.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
10. English is the major language of this country and everyone should speak only English.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
11. Talking about my ethnic background will only make other people dislike me.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
12. Attacking stereotyped views of ethnic groups on T.V., books, magazines, etc. will not reduce stereotypes.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
13. Learning about the customs, values, beliefs and behavior of other ethnic groups will not increase my appreciation of difference.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
14. Knowing more about my own ethnic group will not improve my understanding of myself.  
Strongly Agree 1 2 3 4 5 Strongly Disagree



15. Associating with people of different ethnic backgrounds will not increase my awareness of other ethnic groups.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
16. Encouraging more multicultural activities in school will only increase tensions between ethnic groups.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
17. I cannot reduce prejudice by challenging other people's negative attitudes about ethnic groups.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
18. Analyzing my own feelings and attitudes about other ethnic groups will not make me more sensitive to them.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
19. I know all there is to know about other ethnic groups and don't need to know anymore.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
20. People should defend the people of their own ethnic backgrounds regardless if they are right or wrong.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
21. We should only talk about the similarities between ethnic groups and completely ignore the differences.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
22. There would be less tension between ethnic groups if we stopped trying to understand the differences and focused on all being the same.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
23. Minority groups should be grateful for all the opportunities America has to offer and not complain so much.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
24. If people do not like the policies of the U.S. they should go back to their own countries.  
Strongly Agree 1 2 3 4 5 Strongly Disagree
25. It is impossible for people of different ethnic backgrounds to live peacefully in the same neighborhood.  
Strongly Agree 1 2 3 4 5 Strongly Disagree

GODDARD-RIVERSIDE ENVIRONMENTAL EDUCATION PROGRAM, 1985-86

School-Community Education Program  
Program Administrator: Jack Isaacs  
Project Coordinator: Robert Kanegis

Prepared By:  
Office of Educational Assessment  
New York City Public Schools

PROJECT DESCRIPTION

The Goddard-Riverside Environmental Education Program provides instruction in environmental science and experiences in the natural and urban environment to elementary school pupils in Community School Districts (C.S.D.s) 3 and 6. The goal of the program is to promote awareness of and concern for environmental issues.

In 1985-86, 532 pupils from 12 elementary schools took part in the project. Students from fourth- through sixth-grade classes were eligible to participate. Classes were selected for the project if teachers were interested in environmental science, were willing to attend special orientation and training workshops, were able to spend a week at the Field Camp with their students, and were willing to use the environmental education curriculum to promote student cognitive development in other learning areas.

Sixteen groups of students with their teachers spent one week each at the Goddard-Riverside Field Campus in Rifton, New York. Project instruction at the camp focused on the life support systems essential to the total environment. Pupils received

additional in-school instruction on the urban environment once a week for ten to 13 weeks. This involved classroom projects, community field trips, and visits from environmental experts. The objective of the program was for participants to increase their knowledge of science concepts, as measured by their pretest and posttest scores on a program-developed test.

Project staff consisted of a director of environmental education, one full-time and two part-time environmental counselors, and three camp maintenance and support personnel. The project received \$62 thousand in funding from the New York State Legislature.

#### EVALUATION METHODOLOGY

Project impact was assessed by an analysis of students' scores on a program-developed, multiple-choice test of science concepts (see Appendix A). The test was administered on a pretest and posttest basis at the beginning and end of the project. Perfect raw score on the test was 33 points.

#### FINDINGS

Complete test scores were submitted for 298 pupils. Evaluation findings are presented in Table 1. Overall, mean pretest raw score was 13.4 points (40.6 percent correct), mean posttest raw score was 17.8 points (53.9 percent correct), for a mean gain of 13.3 percent points. Analyzed by school, these data show a pretest range from 30.3 to 53 percent correct responses.

TABLE 1

Students' Mean Raw Scores<sup>a</sup> on a Program-Developed Test,  
by School  
Goddard-Riverside Environmental Education Program, 1985-86

School	N	Pretest		Posttest		Gain	
		Raw Score	Percent Correct	Raw Score	Percent Correct	Raw	Percent
<u>District 3</u>							
P.S. 9	17	11.1	33.6%	16.3	49.4%	5.2	15.8%
P.S. 113	35	12.5	37.9	18.3	55.5	5.8	17.6
P.S. 144	55	13.1	39.7	17.4	52.7	4.3	13.0
P.S. 145	31	17.5	53.0	19.7	59.7	2.2	6.7
P.S. 163	22	15.0	45.4	18.3	55.4	3.3	10.0
P.S. 166	34	17.7	53.6	21.1	63.9	3.4	10.3
<u>District 6</u>							
P.S. 28	9	10.0	30.3	13.8	41.8	3.8	11.5
P.S. 128	24	11.5	34.8	20.5	62.1	9.0	27.3
P.S. 132	23	11.8	35.7	16.6	50.3	4.8	14.6
P.S. 189	48	13.7	41.5	15.8	47.9	2.1	6.4
TOTAL	298	13.4	40.6	17.8	53.9	4.4	13.3

<sup>a</sup>Perfect Raw Score = 33.

- Overall gain was 13.3 percent points.
- Gains varied considerably from 6.4 to 27.3 percent points.

Posttest scores ranged from 41.8 to 62.1 percent correct responses. Gains varied considerably, ranging from 6.4 to 27.3 percent. For some schools such as P.S. 145 and P.S. 189 low gains tended to correspond with high pretest scores which did not allow for greater improvement. Yet, students at other schools, for instance P.S. 163 and 166, made similar pretest scores but achieved higher gains.

#### CONCLUSIONS AND RECOMMENDATIONS

The Goddard-Riverside Environmental Education Program was successful in meeting its objective of increasing students' knowledge of science concepts. Overall, students improved their mean performance at posttest by 13.3 percentage points. However, mean gains varied considerably between schools from a low 6.4 to a high 27.3 percent points. The variation in mean gains cannot be only attributed to high pretest scores since classes showing similar pretest scores achieved different mean gains. Available data do not allow to determine the reason for these differences but grade might be responsible for the variations observed in student performance. The test, for example, might be relatively easy for sixth graders and difficult for fourth graders. In the future, data retrieval forms should include students' grades. Project staff should also establish specific quantitative criteria for successful program completion. A sentence should be added to the program objective, for example, "80 percent of the

participants will show a mean improvement of at least 15 percent from pretest to posttest."

KNOWLEDGE AND CONCEPTS OF SCIENCE

Please DO NOT PUT ANY MARKS IN THIS BOOKLET

1. The bark of a tree is most like
  - (a) a stomach
  - (b) a brain
  - (c) skin
  - (d) bones
  
2. Most green plants take water through their
  - (a) buds
  - (b) roots
  - (c) flower
  - (d) stem
  
3. A habitat is
  - (a) a type of rabbit
  - (b) the study of the habits of animals
  - (c) a place where plants and animals naturally live and grow
  - (d) something an animal eats
  
4. Conservation is best described as
  - (a) building of homes in natural surroundings
  - (b) saving money to buy parks and forests
  - (c) survival of the fittest
  - (d) care and protection of natural resources
  
5. Without green plants we would die because plants provide us with
  - (a) a major source of building materials
  - (b) a major source of oxygen and food
  - (c) a major source of shade
  
6. Birds help us because they
  - (a) fight with squirrels
  - (b) eat insects that destroy crops
  - (c) store nuts for winter
  - (d) make nests in trees
  
7. A fresh-water aquarium is most like
  - (a) a river
  - (b) an ocean
  - (c) a pond
  - (d) a bay

KNOWLEDGE AND CONCEPTS OF SCIENCE

8. Wood is used by people in many ways. Which four of the following can be made of wood?
- (a) furniture
  - (b) cement
  - (c) brick
  - (d) fuel
  - (e) house
  - (f) glass
  - (g) paper
9. Which of the following can be considered part of our environment?
- (a) air
  - (b) water
  - (c) soil
  - (d) cars
  - (e) all of the above
10. Some mammals hibernate (sleep through) the winter because
- (a) they are allergic to snow
  - (b) they cannot find enough food in the winter
  - (c) they need a rest
  - (d) all the birds have flown south
11. What happens to the trash and garbage that is left on the curb for pickup?
- (a) it gets dumped
  - (b) it gets burned
  - (c) it gets buried
  - (d) it gets ignored
  - (e) all of the above
12. The energy crisis has come about because
- (a) we have been conserving wisely
  - (b) we have developed other forms of renewable energy
  - (c) we have been using up our fossil fuels
13. Whales are an endangered species because
- (a) there is not enough water for them to swim in
  - (b) they are being killed by humans
  - (c) they don't have enough food to eat
  - (d) they are being killed by certain kinds of fish
14. A bird with a long, sharp bill would be best adapted for
- (a) crushing seeds
  - (b) straining food from mud
  - (c) spearing fish



KNOWLEDGE AND CONCEPTS OF SCIENCE

15. People are a part of their Environment. This means
- (a) you are a part of everything around you
  - (b) you affect things around you and they affect you
  - (c) you are responsible for what happens in the world
  - (d) all of the above
16. An owl that eats a mouse that eats corn is an example of
- (a) survival of the fittest
  - (b) a balanced diet
  - (c) a food chain
  - (d) Einstein's Theory of Relativity
17. A decomposer is
- (a) an insect that eats leaves
  - (b) a detergent that cleans polluted water
  - (c) a bacteria or fungus that breaks down dead plants and animals
  - (d) a bird that breaks twigs to make its nest
18. Which four of the following would be considered renewable and clean energy sources
- (a) solar
  - (b) nuclear
  - (c) wind
  - (d) oil
  - (e) water
  - (f) coal
  - (g) geothermal
19. Which material is not easily recycled
- (a) paper
  - (b) glass
  - (c) plastic
  - (d) metal
20. The best word to describe the relationship in a community is
- (a) hibernation
  - (b) interdependence
  - (c) industrialization
  - (d) adaptation
21. Being healthy is
- (a) eating right
  - (b) being energetic and active
  - (c) knowing you can do good things and doing them
  - (d) feeling good
  - (e) all of the above

KNOWLEDGE AND CONCEPTS OF SCIENCE

22. Rain falling into a lake from which water vapor then evaporates to form clouds, from which it rains again is a good example of
- (a) natural transportation
  - (b) pollination
  - (c) photosynthesis
  - (d) natural cycle
23. Who is not polluting the environment?
- (a) a woman driving a car
  - (b) a man smoking a cigarette
  - (c) a girl riding a bicycle
  - (d) a boy dropping a candy wrapper on the ground
24. Which four natural communities are we most likely to find in New York State?
- (a) forest
  - (b) lake
  - (c) arctic tundra
  - (d) desert
  - (e) thicket
  - (f) meadow
25. People are good examples of
- (a) omnivores
  - (b) carnivores
  - (c) producers
  - (d) herbivores
26. A pond turning into a marsh, turning into a meadow, turning into a thicket, and then finally into a forest over a long period of time is an example of
- (a) biological succession
  - (b) magic
  - (c) a lot of dry, hot weather
  - (d) food chain
27. Which of the following items can cause water pollution?
- (a) sewage
  - (b) detergent
  - (c) bacteria
  - (d) all of the above
  - (e) none of the above
28. In a tropical forest you would find
- (a) Tarzan
  - (b) very tall trees
  - (c) low humidity
  - (d) grass
  - (e) none of the above

KNOWLEDGE AND CONCEPTS OF SCIENCE

29. Pollution can be caused by

- (a) cars and buses
- (b) factories
- (c) nuclear reactors
- (d) all of the above

30. A good example of camouflage is

- (a) a bird flying south in the winter
- (b) a bee taking pollen from a flower
- (c) a white snow shoe rabbit in the snow
- (d) a bear standing in a meadow

31. One way by which people destroy natural cycles is

- (a) planting trees
- (b) growing vegetables in their garden
- (c) spraying pesticides on trees
- (d) cooking in a solar oven

32. Animals compete for which of the following resources :

- (a) food
- (b) water
- (c) territory
- (d) all of the above

33. Dinosaurs no longer exist because they could not

- (a) adapt to their environment
- (b) find good housing
- (c) hide from their enemies
- (d) raise their young properly

THE END

ETHNIC AWARENESS PROGRAM, 1985-86

School-Community Education Program  
Program Administrator: Jack Isaacs  
Project Coordinator: Howard Levine

Prepared By:  
Office of Educational Assessment  
New York City Public Schools

PROJECT DESCRIPTION

The Ethnic Awareness Program in Community School District (C.S.D.) 9 offers students an after-school program in Afro-American and Hispanic-American history and culture. The project seeks to improve pupils skills, create greater awareness of diverse ethnic heritages, and foster appreciation and respect for their own and other ethnic groups. In 1985-86, the program operated in three elementary schools: P.S. 64, 70 and 90, and in Junior High School 117, serving 100 pupils in grades one through nine. Participation was based on student interest in the program and recommendations of school principals.

Participants attended two-hour sessions three times a week for 26 weeks. Project activities included field trips to community facilities, meetings with leaders of cultural organizations, and the staging of dramatic and musical performances based on ethnic themes. The objective was for participants to increase their knowledge of Afro-American and Hispanic-American history and culture, as measured by their performance on a program-developed test of ethnic themes. Project staff included

four teachers and four paraprofessionals. The New York State Legislature provided \$18 thousand to fund the program.

### EVALUATION METHODOLOGY

Project impact was assessed by an analysis of pupils' scores on a 40-item test of ethnic awareness, consisting of multiple-choice items, matching columns, and identifications (see Appendix A). The test was given on a pre- and posttest basis at the beginning and end of project activities.

### FINDINGS

Test scores were reported for 66 pupils. Since the three data retrieval forms submitted to the Office of Educational Assessment did not indicate the school or the grade level of these participants, mean raw scores are reported by group of pupils (see Table 1). Overall, mean pretest raw score was 7.5 points (18.8 percent correct), mean posttest raw score was 16.6 points (41.5 percent correct), for a mean gain of 22.7 percent points. In general, those groups of students who began with the lowest mean gain (groups one and two) achieved the largest gains of 35.3 and 31.5 percent points, respectively. In contrast, group three made the greatest mean pretest score but achieved the lowest mean gain, 1.2 percent points.

### CONCLUSIONS AND RECOMMENDATIONS

According to the evaluation findings, the Ethnic Awareness Program was successful in meeting its objective. The three

TABLE 1

Students' Mean Raw Scores<sup>a</sup> on a Project-Developed Test  
Ethnic Awareness Program, 1985-86

Group	N	Pretest		Posttest		Gain	
		Raw Score	Percent Correct	Raw Score	Percent Correct	Raw	Percent
1	25	4.1	10.2%	18.2	45.5%	14.1	35.3%
2	24	8.3	20.7	20.9	52.2	12.6	31.5
3	17	10.2	25.5	10.7	26.7	.5	1.2
TOTAL	66	7.5	18.8	16.6	41.5	9.1	22.7

<sup>a</sup>Perfect Raw Score = 40.

- All students achieved gains on the program-developed test.
- Groups with the lowest mean pretest scores made the greatest mean gains.

groups of students for whom data were available increased their knowledge of Afro-American and Hispanic-American history and culture. There was, however, a wide variation in the mean gains achieved by participants and these mean gains were relatively low for all groups. This might indicate that the test is too difficult for the grade level of participants or that it does not measure project activities. Neither of these assumptions could be verified with the available information submitted for evaluation which failed to indicate students' grade level and school. Furthermore, using one testing instrument to measure student performance in such range of grade levels (one to nine) will necessarily result in a wide variation of test outcomes. In the future, project staff should provide information regarding grade level and school of participants. In addition, it might consider designing another testing instrument to measure knowledge of participants in lower grades. Finally, the project objective should be expanded to include quantitative criteria for project success. For instance, the following sentence could be added to the objective: "Eighty percent of participants will increase their knowledge of Afro-American and Hispanic-American history and culture by a mean gain of at least 35 percent."

APPENDIX A  
ETHNIC AWARENESS  
TEST

Multiple Choice: Circle the correct answer

Example: What Civil Rights leader won the Nobel Peace Price?

- |                  |                            |
|------------------|----------------------------|
| a) Malcolm X     | c) Martin Luther King Jr.  |
| b) Marcus Garvey | d) Adam Clayton Powell Jr. |

1- The first humans inhabited...

- |           |                  |
|-----------|------------------|
| a) Europe | c) South America |
| b) Africa | d) Asia          |

2- The inhabitants of Puerto Rico, encountered by Columbus were...

- |          |          |
|----------|----------|
| a) Taino | c) Incas |
| b) Carib | d) Mayas |

3- Reggae music originated in...

- |             |             |
|-------------|-------------|
| a) Barbados | c) Trinidad |
| b) Jamaica  | d) Grenada  |

4- The name of the Puerto Rican National Anthem...

- |                      |              |
|----------------------|--------------|
| a) Mi Viejo San Juan | c) Preciosa  |
| b) La Borinquena     | d) El Jibaro |

5- The merengue is a popular dance of...

- |                       |                |
|-----------------------|----------------|
| a) Cuba               | c) Puerto Rico |
| b) Dominican Republic | d) Haiti       |

6- The ancient stoneheads that were built in the Gulf of Mexico reflected the friendship between the Pre-Columbian people and the...

- |                |             |
|----------------|-------------|
| a) Asians      | c) Arabs    |
| b) Australians | d) Africans |

7- One of the first universities in the world was located at...

- |               |             |
|---------------|-------------|
| a) Timbuktu   | c) Oxford   |
| b) Notre Dame | d) Sorbonne |

8- A Puerto Rican composer was...

- |              |                     |
|--------------|---------------------|
| a) Cervantes | c) Jose Marti       |
| b) Matos     | d) Rafael Hernandez |



## Ethnic Awareness Test

Page 2

9- The two countries that share the Island of Hispanola are...

- a) Trinidad/Tobago
- b) Cuba/Puerto Rico

- c) Dominican Republic/Haiti
- d) St. Thomas/St. John

10- Dances such as the rumba, limbo, and cake walk were influenced by...

- a) Puerto Rico
- b) Spain

- c) Africa
- d) Peru

11- An instrument developed in Africa and used in latin percussion ensembles is...

- a) Conga
- b) Piano

- c) Guitar
- d) Flute

12- What people were captured and forcibly brought to the new world?...

- a) Europeans
- b) Aztecs

- c) Asians
- d) Africans

13- The influential muslim leader who was the national spokesman for the Nation of Islam during the late 1950's was...

- a) Luis Farrakham
- b) Franz Fanon

- c) Malcolm X
- d) Muhammad Ali

14- A major supplier of tropical produce to the northeast is...

- a) Dominican Republic
- b) Cuba

- c) Puerto Rico
- d) Argentina

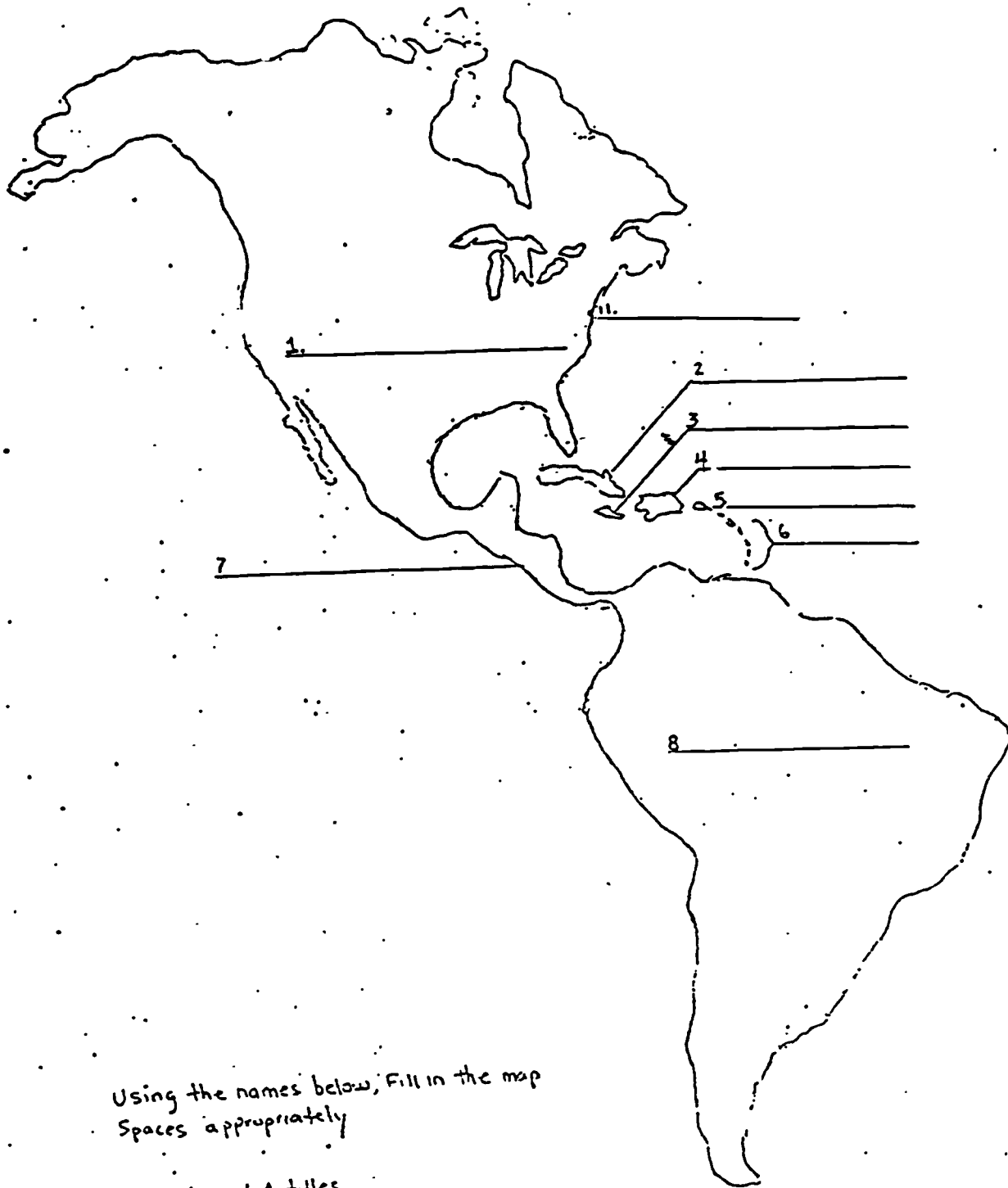
15- Combinations of African, European and Pre-Columbian cultures may be found in...

- a) Capeoira
- c) Africa

- c) The Americas
- d) All of the Above

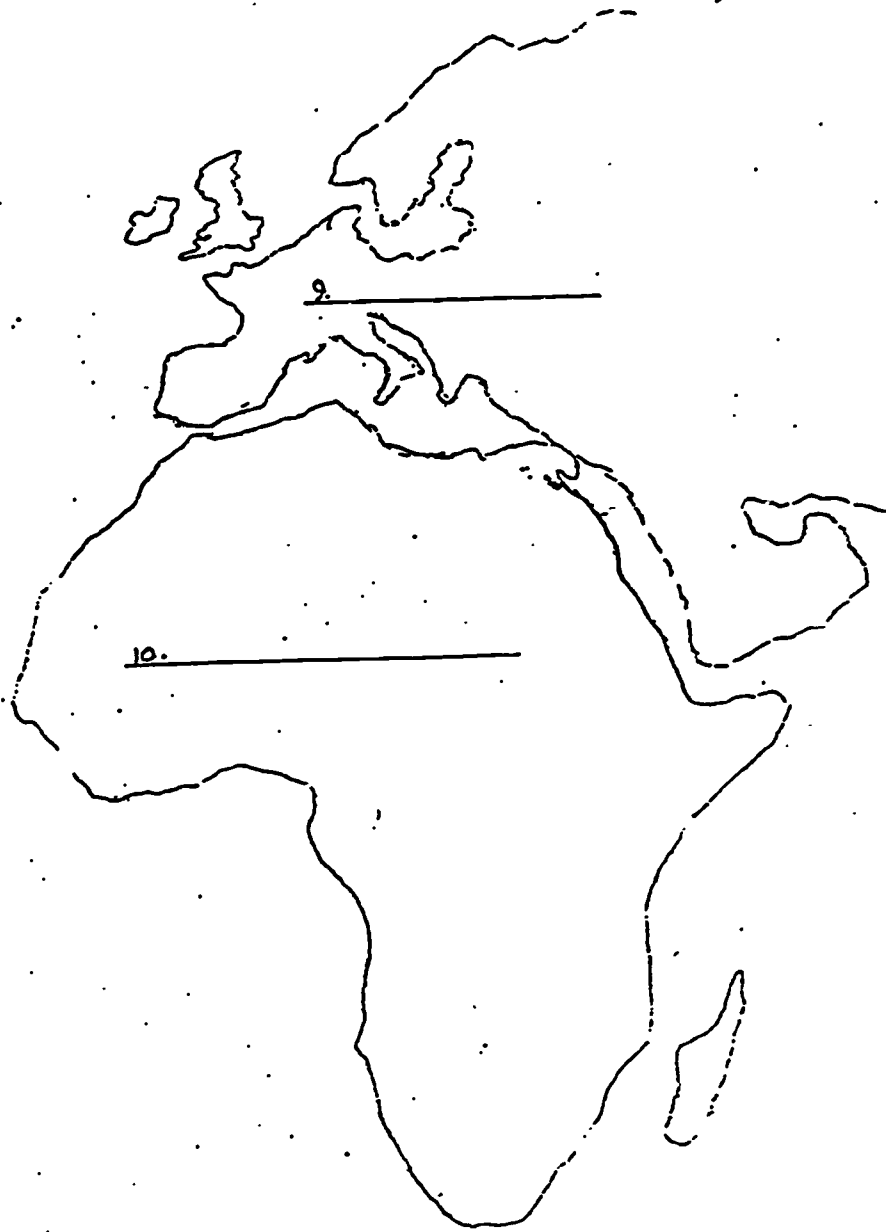
## -MATCHING-

- |   |   |
|---|---|
| 1. Imhotep                                | A- Brazil   |
| 2. Black French Speaking American Country | B- Athlete, Opera Star, Author, Civil Rights Leader       |
| 3. Langston Hughes                        | C- Founder Tuskegee Institute                             |
| 4. Paul Robeson                           | D- Scientist  |
| 5. Pablo Picasso                          | E- West Indian Island                                     |
| 6. Trinidad                               | F- Politician, Lecturer, T.V. Host                        |
| 7. Portuguese Speaking American Country   | G- Engineer and Architect of first stone pyramid in Egypt |
| 8. George Washington Carver               | H- Poet   |
| 9. Herman Badillo                         | I- Haiti  |
| 10. Booker T. Washington                  | J- Painter, Sculptor, Artist                              |
| 11. Cesar Chavez                          | K- Brazilian Martial Arts/Dance                           |
| 12. Roberto Clemente                      | L- Haitian Liberator                                      |
| 13. Tuscon L'Oveverture                   | M- Blood/Plasma   |
| 14. Charles Drew                          | N- Famous Mexican Labor Leader                            |
| 15. Capoeira                              | O- Humanitarian/Baseball player                           |



Using the names below, Fill in the map  
Spaces appropriately

- A. The Lesser Antilles
- B. Africa
- C. Puerto Rico
- D. Cuba
- E. Europe
- F. South America
- G. Central America
- H. HAITI - DOMINICAN REPUBLIC
- I. Jamaica
- J. North America



ORAL HISTORY PROGRAM, 1985-86

School-Community Education Program  
Program Administrator: Jack Isaac  
Project Coordinator: Michael B. Gordon

Prepared By:  
Office of Educational Assessment  
New York City Public Schools

PROJECT DESCRIPTION

The Oral History Program provided training to junior high school teachers in Community School District (C.S.D.) 12 in the techniques necessary for the implementation of an instructional program in oral history. The goal of the project was to complement instructional activities in the areas of communication arts, social studies, and critical reasoning and thinking skills, and to involve students of participating teachers in community life.

In 1985-86, the first year of program implementation, 23 teachers and some 600 students participated in project activities. Volunteer teachers interested in the program were recommended by school principals for program participation. Teachers attended after-school seminars, workshops, and in-classroom demonstration lessons conducted by a consultant on topics such as interviewing, research, questionnaire development, comprehension, writing, critical evaluation, and oral presentation. Additional activities included training in the use of audio-visual equipment, use of public media, advertising and teach techniques, and interviews with celebrities (i.e. Elie Wiesel, Dizzy Gillespie,

Nat Hentoff) and community people. After the training of teachers was completed, pupils participated in these activities.

The project objective was for teacher participants to demonstrate knowledge and skills necessary to implement an oral history program as measured by a program developed test. The project was funded for \$7 thousand by the New York State Legislature, covering the salary of the consultant.

#### EVALUATION METHODOLOGY AND FINDINGS

Project evaluation focused on an analysis of teachers' scores on a project-developed test, consisting of 20 multiple-choice items about interviewing techniques and general factual knowledge (see Appendix A). The test was administered on a pretest and posttest basis at the beginning and end of project activities.

Pretest and posttest scores were reported for 23 teachers. Overall, mean pretest was 8.3 raw score points (41.5 percent correct); mean posttest was 12.7 raw score points (63.5 percent correct), for a mean gain of 4.4 points or 22 percent increase.

#### CONCLUSIONS AND RECOMMENDATIONS

The evaluation findings indicate that teachers increased their performance by 4.4 points from pretest to posttest. This outcome, however, does not allow to assess fully the stated project objective: "teacher participants will demonstrate knowledge and skills necessary to implement an oral history

program." The program-developed test only measures factual knowledge and interview techniques without evaluating the acquisition of skills for program implementation. Appropriate items should be included in the testing instrument. Quantitative criteria for successful program completion should also be established. A sentence should be added to the program objective stating a specific quantitative gain, for instance, "at posttest, teacher participants will achieve a gain of at least 25 percent." However, a log of teacher-run classes would be the most meaningful index of the program's impact.

Project staff could consider an evaluation design, including a program-developed test, and a quantitative performance objective, for the participating students upon whom the project might have the most positive and stimulating impact.

PRE- AND POST- EVALUATION QUESTIONS

1. To help understand the Holocaust you would interview:
  - a. Nassau County Executive Frances Purcell
  - b. Elie Wiesel
  - c. Arthur Kinoy
  - d. All of the above
2. Who wrote "Return to Sender"?
  - a. Elvis Presley
  - b. Jimmie Lee Jones
  - c. Will Dee
  - d. Otis Blackwell
3. A good opening Oral History question is:
  - a. How old are you?
  - b. Can you think of funny anecdotes about your family?
  - c. How many kids do you have?
  - d. What has your life been like?
4. A pupil doing an Oral History should:
  - a. have at least twenty questions prepared.
  - b. prepare three to six questions, then improvise.
  - c. improvise the interview.
  - d. know exactly what information he or she wants to elicit.
5. A teacher preparing a class to interview their family members should:
  - a. write questions that students should ask on the board.
  - b. decide what subjects to explore.
  - c. role play the interview.
  - d. all of the above.
6. It is best to:
  - a. avoid posing questions in the interview in order to achieve spontaneity.
  - b. prepare the interviewee for anything that might come up so there are no unanticipated problems.
  - c. pick the wording of most questions with scientific precision.
  - d. prepare the interviewee in advance for questions that may be posed.



7. True or false: One must always tell the subject precisely how his/her memories may be used and distributed.
8. True or false: It is best to avoid excessively emotional memories.
9. True or false: The interviewee should not change the wording of some questions to the subject, if (s)he does, findings may not be scientifically valid.
10. True or false: Conducting an Oral History will effectively develop some critical thinking skills.
11. True or false: Conducting Oral Histories is considered effective in developing writing skills.
12. The song "All Shook Up" was written to describe:
  - a. a Coke bottle.
  - b. a dance.
  - c. an unnerving experience.
  - d. a love affair.
13. "Foxfire" is:
  - a. a Boston Oral History Program.
  - b. a technique of interviewing.
  - c. an Appalachian region Oral History Program.
  - d. a folk tale first told by early American Indians.
14. Oriana Fallaci's style could be best classified as:
  - a. focused
  - b. confrontational
  - c. probing
  - d. innovative
  - e. open-ended
  - f. approving
  - g. conversational
15. Studs Terkel's style could best be classified as:
  - a. focused
  - b. confrontational
  - c. probing
  - d. innovative
  - e. open-ended
  - f. approving
  - g. conversational

16. James Buckley's style could be best classified as:

63438

- a. focused
- b. confrontational
- c. probing
- d. innovative
- e. open-ended
- f. approving
- g. conversational

17. True or false: In a good Oral History, the role of interviewer and interviewee can easily reverse itself.

18. A good additional funding agency for a local Oral History project would be:

- a. the Ford Foundation
- b. Unitarian Universalist Veitch Foundation
- c. Villers Fund for Seniors
- d. J. M. Kaplan Fund

19. An analagous defense to the Nazis' at Nuremberg is now being fashioned by:

- a. President Botha; South Africa Apartheid
- b. Nicaraguan Sandinistas; World Court Suit
- c. Claus Von Bulow; New York Murder Trial
- d. French Government; Greenpeace Incident

20. True or false: The use of videotape for Oral Histories, if you have access to it, is far superior to tape recorded material.

LINOX HILL -  
ENVIRONMENTAL EDUCATION PROGRAM, 1985-86

School-Community Education Program  
Program Administrator: Jack Isaacs  
Project Coordinator: David Stern

Prepared By:  
Office of Educational Assessment  
New York City Public Schools

PROJECT DESCRIPTION

The Lenox Hill Neighborhood Association and Community School Districts (C.S.D.s) 1 and 2 jointly conducted an environmental education program for elementary school students. Instruction on urban and rural ecology was provided through planned activities in the vicinity of each school, in the city, and at Lenox Hill Camp in Bantam, Connecticut. The project seeks to develop positive attitudes toward the rural and urban environment among participants and to motivate them toward greater educational achievement.

In 1985-86, about 630 students, in grades four through six, from 22 schools participated in the program. Forty-nine of these pupils were also served by the English as a Second Language Program. Elementary school classes, rather than individual students were selected for program participation. Classes were selected according to the following criteria: classes with large members of economically-deprived students who did not have the opportunity to visit rural communities; classes where some of the students were bussed-in from other neighborhoods in order to foster group cohesion and overcome racial and cultural barriers;

and classes with teachers willing to participate in the program which involved in-service training, trips to the city, and a five-day residence at a camp.

Instructional activities involved an in-city program which provided instruction on urban ecology and environmental concepts and themes. Students also participated in a resident camping experience where environmental concepts were applied to rural ecosystems and group living. Students received a total of 35 hours of instruction from participating in both components of the program. Project staff included a coordinator, an environmental education specialist, the camp director, an urban ecology counselor, and three camp staff employees. The Environmental Education Coordinator was responsible for the orientation sessions in the city and at camp for all participating teachers. The New York State Legislature contributed \$62 thousand to support project activities.

The program objective was for students to demonstrate an increased knowledge of environmental science, energy conservation, and ecological concepts as measured by a criterion-referenced test.

#### EVALUATION METHODOLOGY

Evaluation activities focused on the analysis of students' raw scores on a project-developed test (see Appendix A). The test, designed to measure knowledge of environmental terms and

concepts, consists of two equated forms of 33-items each. One of them was administered as a pretest and the other as a posttest

### FINDINGS

Test data were submitted for 512 students in grades four through six from 19 schools. Table 1 shows student test outcomes by grade level, separating fourth-grade pupils who also participated in the E.S.L. program from other fourth graders, and presenting data for grades four/five and five/six together as they were submitted in the data retrieval forms. Mean pretest raw score was 16.4 points (49.8 percent correct responses); mean posttest raw score was 19.8 points (60 percent correct), for a mean gain of 3.4 points (10.2 percent). E.S.L. fourth-graders showed the lowest scores and achieved the lowest gain of 0.7 points or 2.1 percent. Other students' mean pretest scores were about 50 percent or above correct and posttest scores ranged from 60.9 to 71.5 percent correct. Pupils in 4/5 and 5/6 grades achieved the largest improvement of 15.1 percent.

### CONCLUSIONS AND RECOMMENDATIONS

The Lenox Hill - Environmental Education Program was successful in meeting its objective. As indicated by the evaluation findings, students in all grades increased their knowledge of environmental science and concepts. Yet, achievement gains were relatively low for all grades; especially for E.S.L. students which might indicate that the test was too

TABLE 1

Students' Mean Raw Scores<sup>a</sup> on a Project-Developed Test, by Grade  
 Lenox Hill -  
 Environmental Education Program, 1985-86

Grade	N	Pretest Mean		Posttest Mean		Mean Gain	
		Raw Score	Percent Correct	Raw Score	Percent Correct	Raw Score	Percent
4 (E.S.L.)	33	8.9	27.0%	9.6	29.1%	0.7	2.1%
4	28	16.5	50.0	20.1	60.9	3.6	10.9
4/5	27	16.4	49.7	21.4	64.8	5.0	15.1
5	283	17.9	54.2	21.2	64.2	3.3	10.0
5/6	73	18.6	56.4	23.6	71.5	5.0	15.1
6	68 <sup>b</sup>	20.2	61.2	23.0	69.7	2.8	8.5
TOTAL	512	16.4	49.8	19.8	60.0	3.4	10.2

<sup>a</sup>Perfect raw score = 33.

<sup>b</sup>Includes 16 E.S.L. students.

- Overall mean gain was 10.2 percent.
- E.S.L. pupils made the lowest scores and achieved the lowest gain.

difficult for their level of English proficiency. In contrast, the test seemed to be too easy for most other participants who correctly answered about 50 percent or more of the test items at pretest which does not leave too much room for further improvement (ceiling effect). The program-developed test should be revised to eliminate the items most students know at pretest and, preferably, only one form should be administered as both a pre- and posttest. In addition, project staff should consider establishing two different quantitative objectives for project success: one for E.S.L. students to account for their lower reading ability in English and another for other participants. The following sentence, for instance, could be added to the project objective: "Participants will increase their knowledge of environmental science, energy conservation, and ecological concepts by at least 10 percent; E.S.L. students will demonstrate an improvement of five percent."

1+2  
PRETEST -- DISTRICT 2 / LENOX HILL ENVIRONMENTAL EDUCATION RESIDENT PROGRAM

Please do not put any marks in the booklet.

1. All living things
  - (a) crawl.
  - (b) run.
  - (c) fly.
  - (d) grow.
  
2. The best way to make an image look clear when you are using a microscope is to
  - (a) move the lens up and down.
  - (b) move the mirror sideways.
  - (c) move the slide.
  - (d) move the mirror up and down.
  
3. An instrument which you would use to measure air pressure is
  - (a) a thermometer.
  - (b) a weather vane.
  - (c) an anemometer.
  - (d) a barometer.
  
4. A cross section is cut from the bottom of a living tree. The cross section has 40 annual rings. The age of the tree
  - (a) is 40 years.
  - (b) is less than forty years.
  - (c) is much more than forty years.
  - (d) cannot be determined.

PLEASE TURN TO NEXT PAGE.



5. Fog is most like
- (a) snow.
  - (b) hail.
  - (c) clouds.
  - (d) rain.
6. One of these does not belong in a city habitat. It is the
- (a) dog.
  - (b) pigeon.
  - (c) duck.
  - (d) girl.
7. The most important reason for conserving energy today is that
- (a) it saves money.
  - (b) the supplies of oil and coal are limited.
  - (c) it saves time.
  - (d) there are too many cars.
8. The main producer in a fresh water pond is
- (a) fish.
  - (b) turtle.
  - (c) algae.
  - (d) yeast.
9. A place in a city that looks most like a village green is
- (a) a school playground.
  - (b) an empty lot.
  - (c) a shopping center.
  - (d) a park with grass and trees.

PLEASE TURN TO NEXT PAGE.

10. A plant gets energy for photosynthesis from
- (a) food.
  - (b) sunlight.
  - (c) chlorophyll.
  - (d) oxygen.
11. The chief cause of air pollution in a city is
- (a) exhaust from cars.
  - (b) burning leaves.
  - (c) factories.
  - (d) burning fuel in homes.
12. An example of a fossil fuel is
- (a) oil.
  - (b) wood.
  - (c) electricity.
  - (d) water.
13. A fresh water aquarium is most like
- (a) a river.
  - (b) an ocean.
  - (c) a pond.
  - (d) a bay.
14. A pond will become a swamp; a meadow will become a woodland. This is called
- (a) adaptation.
  - (b) evolution.
  - (c) succession.
  - (d) water cycle.

PLEASE TURN TO NEXT PAGE.

15. An aquarium tank contains water, gravel, a green plant, a fish, and a snail. The water gets oxygen from the air and from the
- (a) gravel.
  - (b) green plant.
  - (c) fish.
  - (d) snail.
16. Green plants are different from most other living things because they
- (a) make their own food.
  - (b) grow rapidly.
  - (c) contain many kinds of cells.
  - (d) digest their own food.
17. An instrument which you would use to make something look bigger is a
- (a) periscope.
  - (b) kaleidoscope.
  - (c) microscope.
  - (d) kinoscope.
18. Most fungi, such as mushrooms and molds, get their food by
- (a) absorbing water from the soil.
  - (b) capturing and eating insects.
  - (c) eating tiny animals in pond water.
  - (d) living on other plants and animals.
19. Game refuges and bird sanctuaries are set up in order to
- (a) raise animals for hunting.
  - (b) give animals a safe place to live.
  - (c) keep harmful animals to themselves.
  - (d) fatten animals for sale.

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20. The plant which would most likely grow in the woods is a
- (a) cactus.
  - (b) fern.
  - (c) water lily .
  - (d) corn.
21. The person who is not polluting the environment is
- (a) a woman driving a car.
  - (b) a man smoking a cigarette.
  - (c) a girl riding a bicycle.
  - (d) a boy dropping a candy wrapper on the ground.
22. Some plants cannot grow under the trees in a forest because there is too little
- (a) water.
  - (b) soil.
  - (c) space.
  - (d) sunlight.
23. Water freezes at
- (a) 100 degrees C.
  - (b) 32 degrees C.
  - (c) 212 degrees C.
  - (d) 0 degrees C.
24. The food of an owl is mostly
- (a) seeds.
  - (b) insects.
  - (c) mice and other small animals.
  - (d) wild berries.

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page six

25. A microscope can make things look bigger because it has
- (a) lenses.
  - (b) a mirror.
  - (c) a tube.
  - (d) clips.
26. Take a look at this food chain:
- sun → grass → cow → person.
- The producer in this food chain is
- (a) grass.
  - (b) sun.
  - (c) cow.
  - (d) person.
27. When air pressure is high and there are only cumulus clouds, the weather will be
- (a) stormy.
  - (b) fair.
  - (c) cold.
  - (d) hot.
28. An example of a natural resource that is constantly being reproduced is
- (a) a tree.
  - (b) coal.
  - (c) oil.
  - (d) gold.

PLEASE TURN TO NEXT PAGE.

29. Many acorns are on the lawn. The tree which you would expect to find on or near the lawn is
- (a) maple.
  - (b) elm.
  - (c) oak.
  - (d) pine.
30. Bees are
- (a) not helpful to man because they sting.
  - (b) only good for making honey.
  - (c) not harmful or helpful to man.
  - (d) helpful because they make honey and help to cross pollinate flowers.
31. A living thing which can produce its own food is a
- (a) pig.
  - (b) robin.
  - (c) tree.
  - (d) mushroom.
32. The color of some animals helps to protect them. This is called
- (a) hibernation.
  - (b) migration.
  - (c) camouflage.
  - (d) none of these.
33. The most important reason for planting trees and grass on a bare hillside is to
- (a) prevent erosion.
  - (b) prevent forest fires.
  - (c) provide food for wildlife.
  - (d) provide food for farm animals.

Please do not put any marks in this booklet.

1. A cross section is cut from the bottom of a living tree. The cross section has 40 annual rings. The age of the tree
  - (a) is 40 years.
  - (b) is less than forty years.
  - (c) is much more than forty years.
  - (d) cannot be determined.
  
2. A common weed that can be found growing on a lawn is a
  - (a) rose.
  - (b) pansy.
  - (c) dandelion.
  - (d) water lily.
  
3. Green plants are the most important parts of a pond food chain because they are
  - (a) producers.
  - (b) consumers.
  - (c) decomposers.
  - (d) parasites.
  
4. The part of a tree which helps protect it from insects that cause disease is the
  - (a) root.
  - (b) bark.
  - (c) flower.
  - (d) fruit.
  
5. When a frog is a tadpole it breathes with
  - (a) lungs.
  - (b) gills.
  - (c) its head.
  - (d) its fins.

PLEASE TURN TO NEXT PAGE.

page two

6. The most important reason for planting trees and grass on a bare hillside is to
- (a) prevent erosion.
  - (b) prevent forest fires.
  - (c) provide food for wildlife.
  - (d) provide food for farm animals.
7. Most fungi, such as mushrooms and molds, get their food by
- (a) absorbing water from the soil.
  - (b) capturing and eating insects.
  - (c) eating tiny animals in pond water.
  - (d) living on other plants and animals.
8. A bird which is found in great numbers in the city is the
- (a) bluebird.
  - (b) junco.
  - (c) pigeon.
  - (d) Baltimore oriole.
9. The part of a plant that usually has seeds in it is the
- (a) bud.
  - (b) leaf.
  - (c) stem.
  - (d) fruit.
10. Wildlife refuges and bird sanctuaries are set up in order to
- (a) raise animals for hunting.
  - (b) give animals a safe place to live.
  - (c) keep harmful animals to themselves.
  - (d) fatten animals for sale.

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11. A bird that has a sharp curved beak and strong claws (like a hawk or an owl) probably feeds mostly on
- (a) meat.
  - (b) acorns.
  - (c) wheat and corn.
  - (d) insects.
12. The environment of a paved schoolyard is most like that of a desert because
- (a) it has cracks in the pavement.
  - (b) it is dry and has poor soil.
  - (c) very few plants grow in it.
  - (d) it is made of cement.
13. The part of the plant which holds it in the soil is the
- (a) branch.
  - (b) leaf.
  - (c) root.
  - (d) trunk.
14. The plant which could grow best in a forest is
- (a) cattail.
  - (b) moss.
  - (c) cactus.
  - (d) milkweed.
15. The animal which does not belong in a city street habitat is a
- (a) dog.
  - (b) pigeon.
  - (c) duck.
  - (d) girl.

PLEASE TURN TO NEXT PAGE.

16. An animal which breathes with gills is a
- (a) bird.
  - (b) snake.
  - (c) cat.
  - (d) fish.
17. An example of a fossil fuel is
- (a) paper.
  - (b) wood.
  - (c) coal.
  - (d) water.
18. During the summer a squirrel lives in a nest which is
- (a) on a branch of a tree.
  - (b) on the roots of the tree.
  - (c) on the ground.
  - (d) under the ground.
19. The part of a city street in which water flows to the sewer is called the
- (a) curb.
  - (b) gutter.
  - (c) sidewalk.
  - (d) crown.
20. The green color in grass is called
- (a) glucose.
  - (b) cytoplasm.
  - (c) chlorophyll.
  - (d) cellulose.

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21. The most important reason for conserving energy today is that
- (a) our supply of fossil fuels is limited.
  - (b) it saves time.
  - (c) fossil fuels are hard to find.
  - (d) there are too many cars and trucks.
22. If you want to look at a specimen under a microscope, you put it on a
- (a) lens.
  - (b) slide.
  - (c) dropper.
  - (d) mirror.
23. The part of a tree which can make food is the
- (a) branch.
  - (b) leaf.
  - (c) root.
  - (d) trunk.
24. A type of plant that helps break down a rotting log is
- (a) fungus.
  - (b) cactus.
  - (c) dandelion.
  - (d) cattail.
25. An instrument used to measure air pressure is a
- (a) weather vane.
  - (b) thermometer.
  - (c) barometer.
  - (d) anemometer.

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page six

26. The energy in oil, coal, and electricity came from
- (a) muscles.
  - (b) the moon.
  - (c) the sun.
  - (d) water.
27. Ecology is
- (a) the study of fossils.
  - (b) the study of living things and their environment.
  - (c) the study of plants.
  - (d) the study of animals.
28. An example of a natural resource that is constantly being reproduced is
- (a) a tree.
  - (b) coal.
  - (c) oil.
  - (d) gold.
29. A pond will become a swamp; a field will become a forest. This is called
- (a) adaptation.
  - (b) evolution.
  - (c) succession.
  - (d) the water cycle.
30. The color of some animals helps to protect them. This is called
- (a) hibernation.
  - (b) migration.
  - (c) camouflage.
  - (d) none of these.

PLEASE TURN TO NEXT PAGE.

31. After a heavy rain, the water at the edge of a lake may have a brown color. This is most likely due to

- (a) reproduction of plants.
- (b) soil being washed into the lake.
- (c) animals in the water.
- (d) rocks in the water.

32. Dandelion seeds are usually carried away from the plant by

- (a) wind.
- (b) water.
- (c) man.
- (d) none of these.

33. This is a kind of food chain:

sun → leaf → caterpillar → bird.

The producer in this food chain is the

- (a) leaf.
- (b) bird.
- (c) caterpillar.
- (d) none of these.

THE MUSEUM CONNECTION

School-Community Education Program  
Program Administrator: Jack Isaacs  
Project Coordinator: Heywood Feierstein

Prepared By:  
Office of Educational Assessment  
New York City Public Schools

PROJECT DESCRIPTION

The Museum Connection Program is designed to enhance positive multicultural awareness among fifth-grade students at P.S. 358 in Community School District (C.S.D.) 17. The project seeks to address problems in the school stemming from negative stereotypes, racism, and self-prejudice by developing inter-ethnic understanding and cooperation among pupils. Ultimately, the goal is that not only students but also their families and teachers will become aware of cultural differences and that tensions in the school and the community will be reduced.

In 1985-86, the first year of project implementation, there were 140 participating pupils. The school principal and teachers selected participants on the basis of the students' interest in the program. Activities took place in the Brooklyn Children's Museum which were followed-up by relevant classroom lessons. Four groups of about 35 pupils each visited the museum for two hours, one afternoon a week, for six-week cycles. At the museum workshops, children participated in hands-on exploratory experiences. Classroom activities supplemented the regular social studies curriculum and focused on the study of various cultures,

mythologies, rituals, and other cultural practices. In both settings, the emphasis was on culture and the ways in which it influences people's thoughts, values, and actions so that participants could gain an appreciation of the beliefs and customs of other people as well as increase their self-esteem. The specific project objective was for 80 percent of the participating pupils to improve by 25 percent their awareness and knowledge of cultural differences and similarities that exist in their local school community, as measured by a program-developed test.

Project staff consisted of an after-school teacher and a part-time supervisor who worked with museum staff to develop an appropriate curriculum and introduce it to other teachers in the school. The New York State Legislature provided \$4 thousand to fund the project.

#### EVALUATION METHODOLOGY

Project evaluation focused on the analysis of students' pretest and posttest scores on a program-developed test (see Appendix A). The test consists of 20 true and false, multiple-choice, and short-essay items. It was administered at the beginning and end of each project cycle.

#### FINDINGS

Complete test scores were reported for all participants. These data were analyzed by group of students in each of the four

project cycles. A number was assigned to each of these groups for presentation purposes (see Table 1). Overall, mean pretest raw score was 6.9 points (34.5 percent correct), mean posttest raw score was 13 points (65 percent correct), for a mean gain of 30.5 percent. Apart from students in group IV who achieved the highest mean pretest and posttest scores (46.5 and 70.5 percent correct, respectively), pretest scores for other groups were about 30 percent correct. Mean posttest scores ranged from 62 to 70.5 percent correct responses and mean gains ranged from 24 to 34.5 percent. Group IV students achieved the lowest gains.

Only 59.3 percent of the participants met the project-set criterion of improving by 25 percent their awareness and knowledge of cultural differences and similarities (see Table 2). Group I showed the highest percentage of students (62.9 percent meeting the project objective while group IV had the lowest percentage (42 percent).

#### CONCLUSIONS AND RECOMMENDATIONS

The evaluation findings show that the Museum Connection project did not meet its objective for 80 percent of participants to achieve a gain of 25 percent. Yet, with one exception, all groups of students achieved a mean gain of at least 30 percent indicating that the project had an impact on students' awareness and knowledge of cultural differences and similarities. The problem seems to rest on the testing instrument rather than on student performance. An examination of the test suggests that



TABLE 1

Students' Mean Raw Scores<sup>a</sup> on a Project-Developed Test  
The Museum Connection, 1985-86

Group	N	Pretest Mean		Posttest Mean		Mean Gain	
		Raw Score	Percent Correct	Raw Score	Percent Correct	Raw Score	Percent Correct
I	35	6.1	30.5%	13.0	65.0%	6.9	34.5%
II	41	6.0	30.0	12.5	62.5	6.5	32.5
III	45	6.2	31.0	12.4	62.0	6.2	31.0
IV	19	9.3	46.5	14.1	70.5	4.8	24.0
TOTAL	140	6.9	34.5	13.0	65.0	6.1	30.5

<sup>a</sup>Perfect raw score = 20.

- Overall, mean gain was 30.5 percent.

TABLE 2

Percentage of Students Meeting Project-Set Criterion<sup>a</sup>  
The Museum Connection, 1985-86

Group	N	<u>Meeting Criterion</u>	
		N	%
I	35	22	62.9%
II	41	26	63.4
III	45	27	60.0
IV	19	8	42.1
TOTAL	140	83	59.3

<sup>a</sup>Eighty percent of participants will improve by 25 percent their awareness and knowledge of cultural differences and similarities.

- About 59 percent of participants met the program objective criterion.

the seven short-essay items might be too difficult for fifth graders. Project staff should consider revising the test, eliminating the essay questions and replacing them with multiple-choice items.

THE MUSEUM CONNECTIONPRE- POST-TEST1985 - 1986

NAME: \_\_\_\_\_

DATE: \_\_\_\_\_ CLASS: \_\_\_\_\_ ROOM: \_\_\_\_\_

Read all directions and questions carefully.

For questions 1-8 darken the circle that gives the right answer.

T = TRUE

F = FALSE

DK = DON'T KNOW

1. The U.S.A. was the first country to practice democracy.  
T ( )                      F ( )                      DK ( )
2. Modern scientists never apply knowledge obtained from past civilizations to resolve contemporary problems.  
T ( )                      F ( )                      DK ( )
3. The American culture tends to change more rapidly than other countries.  
T ( )                      F ( )                      DK ( )
4. Natural environment helps shape culture.  
T ( )                      F ( )                      DK ( )
5. Art does not reflect the traditions of a culture.  
T ( )                      F ( )                      DK ( )
6. Museums use primary and secondary sources to analyze cultural patterns.  
T ( )                      F ( )                      DK ( )
7. Through migration and immigration people of different cultural backgrounds influence one another.  
T ( )                      F ( )                      DK ( )
8. There are universal similarities among all cultures.  
T ( )                      F ( )                      DK ( )

For questions 9-13 darken the letter that gives the correct answer.

9. Every culture:
- (A) has common values and traditions
  - (B) must solve problems of establishing relations with other groups
  - (C) make adaptive choices based on environment
  - (D) all of the above
10. Which one of the following statements are false about the eating customs of a culture:
- (A) Religious Jews will not eat pork or shellfish
  - (B) Many Japanese people sit on the floor to eat
  - (C) Americans are taught to eat 2 meals a day
  - (D) In some cultures, noise shows an appreciation for food, and quiet eating is considered rude
11. The most obvious thing you could learn about a culture from examining its pots and pans is:
- (A) their form of government
  - (B) materials available to its people
  - (C) their religious customs
  - (D) their level of communication
12. All of the following are true about a culture except:
- (A) cultural traits are learned from birth
  - (B) geography and climate account for differences between cultures
  - (C) cultures do not borrow ideas from one another
  - (D) all cultures must meet the basic needs of shelter, food, and clothing for its people
13. In studying the language of a culture, we can learn:
- (A) about migrations of people
  - (B) how much cultures have borrowed from each other
  - (C) stories about things that happened to people who lived long ago
  - (D) all of the above

For questions 14-20 be specific.

14. How might advanced technology affect a culture?

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15. What is one way you reflect your culture?

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16. What kinds of things could you learn about a culture by looking at its statues?

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17. What is the primary role of an anthropologist?

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18. Give an example of how your culture has adapted to its environment.

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19. New York City is often called a "stew" or "melting pot". Do you think this is true? Explain why or why not.

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20. Explain a cultural custom that is different from your own.

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