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ABSTRACT

The Alternative Basic Comprehensive Program (Project ABC) was a special alternative program for bilingual high school students in New York City. The project targeted two high schools with an influx of newly arrived immigrant students from Cambodia, Vietnam, and Spanish-speaking countries of the Caribbean and South America. The program was designed to provide students of limited English proficiency with instruction in English as a Second Language (ESL). Native language arts instruction was available in Spanish only in content areas. The project also aimed to develop student and parent career awareness. The project, which enrolled 180 males, 180 females, and 21 students with gender not reported, was fully implemented, and met its objectives in ESL, career development, occupational aspirations, attendance, dropout rate, staff development, the development of an ESL curriculum guide, and parental involvement. It partially met its objectives for content areas and partially met curriculum development objectives. Recommendations are made for the following year. One improvement will be a bilingual Russian class. Appendix A describes data collection and analysis, and Appendixes B and C describe implementation at the two sites. (SLD)



OREA Report

Alternative Basic Comprehensive Program (Project A.B.C.) Special Alternative Instructional Program Transitional Bilingual Education Grant T003E00074 1991-92

FINAL EVALUATION PROFILE

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Alternative Basic Comprehensive Program
(Project A.B.C.)
Special Alternative Instructional Program
Transitional Bilingual Education Grant T003E00074
1991-92

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7/7/92



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Additional copies of this report are available from:

Dr. Tomi Deutsch Berney Office of Research, Evaluation, and Assessment New York City Public Schools 110 Livingston Street, Room 732 Brooklyn, NY 11201 (718) 935-3790 FAX (718) 935-5490



FOREWORD

The body of this report is preceded by an Extract which presents an overview of salient points of the project: funding cycle; enrollment figures; background of students served; admission criteria; and programming features, strengths, and limitations, including the outcome of all objectives. The extract also presents the conclusions drawn by the Office of Research, Evaluation, and Assessment (OREA) about the program and its recommendations for program improvement.

The extract is followed by the body of the report, titled <u>Program Assessment</u>. This includes such information as staffing, program implementation, and outcome and implementation objectives. Instructional objectives are presented first, followed by noninstructional objectives. The report then addresses those aspects of programming mandated by Title VII regulations that do not have specifically stated objectives. This may be information on attendance and dropout rate, grade retention, mainstreaming, referrals out of the program to meet special needs of the students, and withdrawals. A case history concludes the report.

Data for this profile were collected and analyzed using a variety of procedures, which are described in Appendix A following the text.



Office of Research, Evaluation, and Assessment New York City Public Schools

E.S.E.A Title VII Evaluation Report

Alternative Basic Comprehensive Program (Project A.B.C.)

Transitional Bilingual Education Grant T003E00074 1991-92

EXTRACT

PROJECT DIRECTOR: Mrs. Julia Sánchez

FUNDING CYCLE: Year 2 of 3

SITES

School	Borough	Grade Levels	Enrol	lment*
			(fall)	(spring)
Christopher Columbus High School	Bronx	9, 10, 11, 12	234	229
Walton High School	Bronx	9, 10, 11, 12	88	90

^{*}The project enrolled 391 students, serving 322 in the fall and 319 in the spring. Males numbered 180, females 180; gender was not reported for 21 students.

STUDENT BACKGROUND

Native Language	Number of Students	Countries of Origin	Number of Students
Spanish	49	Vietnam	55
Vietnamese	49	U.S.S.R.	46
Chinese	43	Korea	38
Mandarin	21	Dominican Republic	31
Cantonese	21	China	27
Other	1	Cambodia	22
Russian	4 6	Yugoslavia	16
Portuguese	39	Puerto Rico	12
Khmer	22	Hong Kong	8
Arabic	15	India	6
Farsi	8	Guyana	5
English	7	Italy	5
Italian	5	Other	116
French	. 4	Unreported	4
Other	96		
Unknown	8		

Median Years of Education in Native Country: 8.0; in the United States: 3.0

Percentage of Students Eligible for Free Lunch Program: 73.1

ADMISSION CRITERIA

The project admitted students who scored at or below the 40th percentile on the Language Assessment Battery (LAB). The project also relied on teacher recommendations, data obtained from student records, parent interviews, and personal interviews of students. Newly arrived students received priority because they had the greatest need for the program.



PROGRAMMING

Design Features

Alternative Basic Comprehensive Program (Project A.B.C.) was a special alternative program for bilingual high school students in New York City.

The project targeted two high schools with an influx of newly arrived immigrant students from Cambodia, Vietnam, and Spanish-speaking countries of the Caribbean and South America. The program was designed to provide students of limited English proficiency (LEP) with instruction in English as a Second Language (E.S.L.). This was supplemented by instruction in the Native Language Arts in Spanish only, and only within content area instruction. The project also aimed to develop student and parent career awareness. To accommodate the large influx of Russian students, Columbus High School will provide a Russian bilingual class next year.

Capacity building. A variety of other funding sources will be utilized and efforts made to secure assistance from private/volunteer educational foundations, agencies and interests. Enriched school activity and extended-day activities were already subsidized with tax-levy monies. This year, and in succeeding years, an additional 10 percent of the costs will be absorbed by tax-levy funds. Teacher training will be continued, using training workshops provided by the High School Division, the Division of Bilingual Education, and the Division of Curriculum and Instruction of the New York City Public Schools.

Strengths and Limitations

Ongoing collaboration between the school principals and the project director was a strength, as was the tutoring provided in the resource room during and after school hours and during the lunch hour.

CONCLUSIONS AND RECOMMENDATIONS

Project A.B.C. was fully implemented. It met its objectives for E.S.L., career development, occupational aspirations, attendance, dropout rate, staff development, the development of an E.S.L.-based curriculum guide, and parental involvement. It partially met its objective for content area subjects, meeting it at both schools both semesters except for mathematics in the spring term at Walton High School. It partially met the curriculum development objective for instructional units by developing two (rather than the projected four) instructional units each in science and mathematics, but it developed none in social studies. The project did not meet the student apprenticeship/internship objective, as agencies could not provide staff to supervise apprentices.

The conclusions, based on the findings of this evaluation, lead to the following recommendations:

- Explore reasons why students at Walton High School failed to meet the content area objective in mathematics so that remedial programs can be designed to focus on students' weak areas.
- Provide alternative internship/apprenticeship programs which relieve agencies of the responsibility for utilizing staff to supervise apprentices.



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PROGRAM ASSESSMENT

STAFFING

Title VII Staff (Total 4)

<u>Title</u>	<u>Degree</u>	Language Competencies	Title VII Funding	Other Funding
Project Director	M.A.	Spanish	Full time	
Resource Specialist	MD.	Vietnamese	Full time	
Resource Specialist	M.S.	Vietnamese	Part-time	Tax-levy
Paraprofessional	H.S.	Vietnamese	Full time	

Other Staff Working With Project Students (Total 66)

Title		<u>Degree</u>		Certification				ciencies (TP CP*
Teachers	53	Ph.D.	2	Spanish	4	Spanish	TP	11
Guidance		M.A.	42	E.S.L. (T.P.D.)	2	Chinese	TP	3
Counselors	8	M.S.	12	E.S.L.	19	French	TP	3
Paraprofessionals	5	B.A.	2	English	2	Urdu	TP	1
		B.S.	3	Reading	1	Vietnamese	TP	6
		High School	5	Biology	2	Italian	TP	1
		_		Social Studies	6			
				Social Studies (T.P.D.	0.) 2			
				Chemistry	1			
				General Science	2			
				Mathematics	4			
				Health Education	1			
				Music	1			
				Art	1			
				Business Education	1			
				Guidance	8			
				Secretarial Studies	3			

All staff were certified in areas they served.

IMPLEMENTATION AND OUTCOMES (Objectives prefaced by •)

The project relied on formal tutoring by staff members, informal peer tutoring, an extended school day with flexible pacing, and the use of E.S.L. methodology in content area curricula through learning centers. Students could enroll in college courses and receive both high school and college credit.



3

^{*}Teaching Proficiency (TP): Competent to teach in this language. Communicative Proficiency (CP): Conversational capability only.

English as a Second Language (E.S.L.)

E.S.L. Classes

High School	Level	Periods Weekly
Christopher Columbus	Beginning Intermediate Advanced Transitional	40 30 15 15
Walton	Beginning Intermediate Advanced Transitional	40 30 15 15

Data on the numbers of students at each E.S.L. level were unavailable.

Teachers used tape recorders to give students additional instruction in English. Paraprofessionals tutored students individually in the classroom and resource room. Advanced mainstream students tutored project students during free periods or after school. Advanced project students provided the same tutorial services for their peers. In the resource room, the resource specialist grouped students who spoke the same native language so that they could provide further assistance to each other.

Instructional materials are listed in Appendix B for Christopher Columbus High School and Appendix C for Walton High School.

• Participating students will demonstrate a significant increase in English language proficiency.

Evaluation Instrument: Language Assessment Battery (LAB)*

Pretest: May 1991; posttest: May 1992.

Number of students for whom pre- and posttest data were reported: 229

Mean gain: 7.2 N.C.E.s (s.d. = 12.5)

Mean gain is statistically significant (t=8.75, p<.05).

Project met the E.S.L. objective.

Native Language Arts (N.L.A.)

The school provided books in the native language, and dictionaries in English/Vietnamese, English/Chinese, English/Korean, English/Khmer, English/Russian, and English/Bengali in the resource room. The paraprofessionals and resource teacher conversed with the students in their native language as necessary.



^{*}OREA used a gap reduction design to evaluate the effect of supplementary instruction on project students' performance on the LAB. Since all LEP students in New York City are entitled to such instruction, no valid comparison group exists among these students, and OREA used instead the group on which the LAB was normed. Test scores are reported in Normal Curve Equivalents (N.C.E.s), which are normalized standard scores with a mean of 50 and a standard deviation of 21.06. It is assumed that the norm group has a zero gain in N.C.E.s in the absence of supplementary instruction and that participating students' gains are attributable to project services.

Content Area Subjects

Teachers taught social studies and science in Spanish or sheltered English and mathematics in Spanish only. Paraprofessionals and seniors tutored individual and small groups of students.

At Walton High School, teachers used E.S.L. methodology to review general science topics and prepare students for the Regents Competency Test (R.C.T.).

The resource specialists and paraprofessionals helped 15 project students with the mainstream subjects of advanced chemistry, geometry, and sequential mathematics. They also taught students how to use computer software to interpret word problems in mathematics and review for R.C.T.s in social studies, biology, physics, and chemistry. The students used word processors for book reports and homework assignments.

Content area subject classes were offered five times per week. For a list of instructional materials, see Appendix B for Christopher Columbus High School and Appendix C for Walton High School.

• At least 70 percent of students enrolled in E.S.L. content-based classes (science, mathematics, social studies) will score at or above the criterion of 65.

Evaluation Indicator: final course grades.

Passing Grades in Content Area Courses

High School	Subject		Fall	<u>S</u> r	oring
		Enrollment	Percent Passing	Enrollment	Percent Passing
Christopher Columbus	Mathematics	190	76.3	199	75.4
	Science	156	75.0	164	82.3
	Social Studies	172	88.4	175	84.0
Walton	Mathematics	78	74.4	70	67.1
	Science	67	85.1	70	72.9
	Social Studies	79	87.3	69	82.6

Project met content area subjects objective, except for mathematics in the spring at Walton High School.

Career Development

The resource specialist used an occupational outlook handbook and college bulletins to survey college admission and career requirements with project students. The students received advice on how to behave at an interview.

• The program will organize at least one career conference with representatives from eight major career clusters.

Lyaluation Indicator: program activity records.

All program students participated in the Career Day conference in the spring. Representatives of computer occupations, hotel and motel management, physical therapy, and at least five other career fields offered workshops.

At Walton High School, career specialists from City University of New York, the Massachusetts Institute of Technology, and Brooklyn Polytechnic Institute came to the school to give the students information about careers in technology, medicine, and business.

Project met career development objective.



Student Internships

 The career resource specialist will have developed student apprenticeships/internships at 15 or more sites.

Evaluation Indicator: program records.

Community representatives gave students leads to job possibilities, and five students were able to get jobs. A reduced and limited job market made it virtually impossible to get apprenticeships, since most agencies could not provide staff to supervise apprentices.

Project did not meet the student apprenticeship/internships objective.

Occupational Aspirations

At Christopher Columbus High School, the resource teacher used an occupational outlook handbook and college bulletins to give students and their parents information about careers and college. Students and teachers exchanged ideas during question-and-answer periods. Staff helped seniors get information from colleges and assisted them in contacting college admissions offices and in completing college applications and financial aid forms.

At Walton High School, teachers discussed careers with students in the E.S.L. classes. They explained to eleventh and twelfth grade students and their parents how to select the right college courses for their chosen careers.

• As a result of participating in the program, 75 percent of students will show a significant improvement in occupational aspiration.

Evaluation Instrument: student attitude questionnaire.

At Christopher Columbus High School, of the 124 students surveyed, 85 percent (106) indicated that they had learned a lot about jobs and careers: 79 percent (98) indicated that the courses made them think a lot about selecting a career; and 77 percent (96) felt that the courses made them very enthusiastic about the career they planned to enter.

At Walton High School, of the 80 students surveyed, 84 percent (67) indicated that they had learned a lot about jobs and careers and that the course made them think a lot about selecting a career; 77 percent (62) said that the courses made them enthusiastic about the career they planned to enter.

Project met the occupational aspirations objective.

Other Activities

At Christopher Columbus High School, 84 students and 6 parents visited the National Aquarium, the Flag House-1812 Museum, and the Fort McHenry National Monument in Baltimore, Maryland.

At Walton High School, 49 students visited Washington, D.C., went to a show on Broadway, and participated in a Thanksgiving celebration and a multicultural New Year's party.

Attendance

The resource specialists checked the absentee lists daily and called students' parents as needed. In addition, the school sent weekly attendance cards in English or Spanish to the parents of students on absentee lists.



 As a result of participating in the program, student attendance will be significantly higher than that of mainstream students.

Evaluation Indicator: attendance records.

Attendance Rates

High School	Project Students	Mainstream Students	<u>Difference</u>
Christopher Columbus	94.3		15.3 *
Walton	92.5		14.5 *

p < .05

Project met attendance objective. Last year the Objective was met at one site only. The attendance rate rose 1.6 percent from 90.9 at Walton High School and 17.8 percent from 76.5 percent at Christopher High School.

Dropout

The school contacted the parents of potential dropouts. The resource specialist and the social worker counseled the students and provided them with a list of General Equivalency Diploma (G.E.D.) training schools along with letters of recommendation, if it appeared that they might not return to school.

Program students will have a significantly lower dropout rate than similar non-program students.

Evaluation Indicator: school records.

The dropout rate for project students at Christopher Columbus High School was 1.86 percent up from the zero rate of the previous year. Data for the whole school was from the 1989-90 school year, at which time the rate was 6.7 percent.

Project students at Walton High School had a 2 percent dropout rate (down from last year's 4.7 percent) vs. 5 percent for the entire school.

Project met dropout rate objective.

Grade Retention

Sixty-two students (15.9 percent of participants) were retained in grade. This was considerably more than last year's 19. No objective was proposed in this area.

Enrollment in Post-Secondary Institutions

None of the graduating students were reported as having applied for enrollment in post-secondary institutions.

Students With Special Academic Needs

Special education. Students thought to be in need of special education services are identified by teachers, guidance counselors, and resource specialists. The students are then referred to the School-based Support Team (S.B.S.T.). Procedures for placement as contained in the New York City Division of Special Education's Standard Operating Procedure Manual are then followed. Project A.B.C. did not offer special services to disabled students.



Remedial programs. No students were referred to remedial programs, as in the previous year.

Gifted and talented programs. No students were referred to gifted and talented programs, although 25 were referred last year. The project did not provide any special services to students who were gifted and talented.

Mainstreaming

Nine students (2.3 percent of participants) were mainstreamed, eight more than in the previous year.

Academic achievement of former project students in mainstream. No data were reported on any former project students in the mainstream.

Staff Development

• By the end of the second project year, 85 percent of program staff members will participate in 90 percent of teacher training workshops and conferences.

Evaluation Indicator: project records.

All program staff participated in 90 percent of teacher training conferences and workshops.

The staff received training in such topics as the impact of divorce on adolescents, AIDS, concerns and achievements of Asian students, the infusion of career education into the curriculum, women in a multicultural curriculum, school security, and child and adolescent abuse. There were monthly department and faculty meetings. The project also held workshops at the City University of New York (CUNY).

Project met the staff development objective.

Curriculum Development

• Ly the end of the second project year, the curriculum/resource specialist will have developed at least four instructional units in each of the following: mathematics, science, and social studies.

Evaluation Indicator: project-developed instructional materials inventory.

At Christopher Columbus High School, the resource specialist developed a curriculum guide for science and for proofs in plane geometry as well as a teacher's guide for the Regents examinations in chemistry. At Walton High School, the specialist developed a course guide for mathematics and a teacher's guide for the R.C.T. in science. No social studies instructional units were developed.

Project partially met the curriculum development objective for the development of at least four instructional units in science, mathematics, and social studies.

• By the end of the second project year, the curriculum specialist will have produced an E.S.L.-based curriculum guide in at least one career cluster.

Evaluation Instrument: project-developed instructional materials inventory.

An E.S.L.-based curriculum guide was developed to prepare students for job interviews.

Project met E.S.L.-based curriculum guide objective.



Parental Involvement

An average of 20 parents of project students attended weekly Saturday morning training sessions in E.S.L.

• Parents of students who participate in the project will show an attendance rate at Open School Day/Evening equal to or greater than that of mainstream parents

The school sent letters of invitation to parents in English, Spanish, Vietnamese, Chinese, or Khmer a few days before Open School Days/Evenings. In addition, the staff reminded the parents of the dates by calling them at home.

The rate of attendance of all the Christopher Columbus High School parents in the spring term at Open School Day, Evening interviews was 25.2 percent, while the rate for project students was 28.0 percent.

At Walton High School, the attendance rate for mainstream parents and project parents was the same.

Project met parent attendance rate objective.

CASE HISTORY

B. arrived from Romania with very little previous high school education. After entering Project A.B.C. she came regularly to the resource room for assistance in studying. She benefited so much from the help she received that she volunteered to tutor another student in mathematics and chemistry. She was one of the 31 students who made the "Top 100 Scholars" list and graduated high school this year.



APPENDIX A

DATA COLLECTION AND ANALYSIS

COLLECTION

OREA evaluation consultants visit sites and interview key personnel. The project director gathers data and, with the consultant, completes forms (as shown below) as necessary.

Student Data Form

This one-page form is filled out by staff for each participating and mainstreamed student. OREA gathers data from this form on backgrounds, demographics, academic outcomes, attendance, referrals, and exit from the program.

Project Director's Questionnaire

The Project Director's Questionnaire includes questions on staff qualifications, program implementation, periods of instruction, and instructional materials and techniques.

Project Director's Interview

The interview gathers information on program and student or staff characteristics not supplied by the Project Director's Questionnaire. The interview also allows project staff to offer qualitative data or amplify responses to the questionnaire.

Citywide Test Scores

OREA retrieves scores centrally from the Language Assessment Battery (LAB) and other citywide tests. For evaluation purposes, these test scores are reported in Normal Curve Equivalents (N.C.E.s). N.C.E.s are normalized standard scores with a mean of 50 and a standard deviation (s.d.) of 21.06. They constitute an equal-interval scale in which the distance is the same between any two adjacent scores. A gain of 5 N.C.E.s is the same whether it is at the lower or the higher end of the scale. N.C.E.s can be used in arithmetic computations to indicate group progress. (Percentile scales, although more familiar to many, are unsuitable for such computations since they are not equal-interval.)

Likert-Type Surveys

Likert-type surveys, in which respondents mark their opinions on a scale from one to five, are used in a variety of ways. They examine student attitudes (i.e., toward school and career, native language use, and native and mainstream cultures). They also assess staff and parent attitude and reactions to workshops and other activities.

<u>ANALYSIS</u>

Gap Reduction Evaluation Design

OREA uses a gap reduction design for measuring changes in standardized tests. Since no appropriate non-project comparison group is available in New York City, where all students of limited English proficiency (LEP) are entitled to receive supplementary services, OREA compares the progress of participating students with that of the group on which the test was normed. It is assumed that the norm group would show a zero gain in the absence of instruction, and gains made by project students could be attributed to project services. Scores are reported in Normal Curve Equivalents (N.C.E.s), which are normalized standard scores with a mean of 50 and a standard deviation of 21.06. (See "Citywide Test Scores" above.)

To test whether pre/posttest gains are greater than could be expected by chance alone, OREA uses a t-test. To test whether a difference between two proportions (e.g., program and mainstream attendance rates) is



greater than could be expected by chance. OREA uses a z-test and reports the differences between the two proportions. The level of significance is set at .05 for all tests.

Techniques For Minimizing Error

The evaluation procedures minimize error by providing for proper administration of evaluation instruments through a combination of testing at 12-month intervals, appropriate analysis procedures and reporting.

Instruments of measurement include the LAB (see above), the Degrees of Reading Power (D.R.P.) test, the Metropolitan Achievement Test--Mathematics (MAT-Math), El Examen de Lectura en Español (ELE). Likert-type scales (see above), and project-developed tests. Except for Likert scales and project-developed tests, these instruments are scored on a citywide basis at the Scan Center of the New York City Public Schools.



APPENDIX B

Columbus High School

E.S.L.

Turning Points 1, 2, 3, 4			
including workbooks	Iantorno & Popa	Addison Wesley	1989
Scope E. anthology	K. Robinson	Scholastic, Inc.	1988
Fundamentals of English Grammar	B. Matthew	Prentice Hall Regents	1985
Understanding & Using E. Grammar	B. Schraffer	Prentice Hall Regents	1989
Side-by-Side 1,2	S. Molinsky	Prentice Hall Regents	1982
Lado E. Series	R. Lado	Prentice Hall Regents	1980
Line by Line	S. Molinsky	Prentice Hall Regents	1983
Grammar Work	P. Breyer	Prentice Hall Regents	1982
Skits in English	Mury E. Hines	Prentice Hall Regents	1980
Skill Sharpeners	J. De Philipp	Addison Wesley	1984
Double Action E.	E. Stevick	Addison Wesley	1980
The Contender	R. Lipsyte	Harper Keypoint	1987
Great Anterican Stories	C. G. Draper	Prentice Hall Regents	1985
Elementary Reader in English	R. Dixson	Prentice Hall Regents	1983
Developing Reading Skill	L. Markstein	Newbury House	1983
Ele. Composition Practice 1	L. Blanton	Newbury House	1979
Summer of My German Soldier	Greene Wendy Popp.		1988
Reflections	G. Suzann	Newbury House	1979
Mathematics Instructional Materials			
Prealgebra	Hoffman & Edwards	Holt, Rinehart, & Winston Co.	1986
Integrated Math. course I,II,III	Dressler & Keenan	AMSCO P. Inc.	1982
Reviewing Integra. Math Course I	M. Occhiogrosso	AMSCO P. Inc.	1990
Advanced Math. Concepts	Yunker & Elswick	Merill, Bell & Howell Co.	1986
Calculus with Analyze Geo.	M. Protter	·	
C.B. Morrey	Addison Wesley		1967
Science Instructional Materials			
Biology & Human Progress	C. Tanzer	Prentice Hall, Inc.	1986
Physic Workshop	S. Rosen	Global Book Co.	1988
Chemistry: The Study of Matter	H. Dorin	Cebco Standard Poc	1982
Review of Chemistry	R. Capie	United Publishers Co.	1988
Physics: Its Methods	A. Taffel	Allyn & Bacon	1981
Review of Physics	H. Gottilieb	United Publishers Co.	1991
Earth Science	S. Namowitz	D. Van Nostrand	
Health Activity Masters	K. Bridge	Houghton Mifflin Co.	1989
Social Studies Instructional Materials			
People, Places & Change	L. Berry, R. Ford	Holt, Rinehart & Winston	1981
Global Studies: Civilization	L. Delly, R. Loid	2201, Amendit of Whiteh	1,01
of Past & Present	H. Brown	AMSCO Inc.	1988
USA: The Unfolding Story of America	P. Groisser & S. Levin		1987
It's Your Bill of Rights	S. Brandy	Constitutional Rights Found.	1991
Economics for Everybody	G. Antell & W. Harris	•	1982



APPENDIX C

Walton High School

E.S.L.

English for the Changing World (Book 1A, 1B) The Whistle The Angry Sea English For the Changing World (Book 2, 4) English For the Changing World (Book 5, 6) Beyond Time and Space, 1 · 6 Line by Line (1 & 2) Side by Side (1 & 2) Beyond the Beginning Great American Stories Beyond Time and Space Writing Competently Leading Road to Writing	Lado S. Molinsky S. Molinsky Hyzer & Church C. G. Draper Robert Putter	Prentice Hall Regents Prentice Hall Regents Prentice Hall Regents Prentice Hall Regents Global Book Co.	1983 1982 1985
Scope English Anthology (Level 5)	K. Robinson	Scholastic, Inc.	1988
Scholastic Composition (for transitional classes) (Level 1 & 2) Writing Power Real World English Reading Literature (Transmon classes) Mathematics Instructional Materials			
Mathematics instructional Materials			
R.C.T. Mathematics Fundamental Math. &	John Allasio	West Sea	1989
Sequential Math. Course I, II, III			
Integrated Mathematics Course 1	Dressler & Keeman	Anisco	1989
Science Instructional Materials			
R.C.T. review for N.Y.S. Biología Humana Anatomía		Prentice Hall Regents	1988
Fisiología Higiene La Materia y La Energia General Science Physical Science Human Biology	Dr. Mario E. Dehigo Heimter & Arica	Columb u s	•
Zoology		·	
Chemistry Physics Workshop (Rook 1 2 3)	Satismour Doson	Holt	
Physics Workshop (Book 1, 2, 3)	Seymour Rosen		

Social Studies Instructional Materials

Participation in Government American History Global History (Course 1 and 3) Supplementary Global U. S. History and Government Global Studies Historia del Antiguo Continente Exploring World History

