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#### ABSTRACT

This issue of Kaleidoscope, which focuses on projects involving innovative educational changes, describes 102 programs in elementary and secondary schools in Massachusetts. The projects cover a wide range of educational interests, including school administration and environment, guidance and special needs programs, curriculum areas, total program experimentation, and school management. Each project description includes a statement of objectives and content, evaluative comments, professional personnel breakdown, costs, and information contacts. (RA)

# KALEIDOSCOPE

A Decree Commence of Proposition Land Beach

Massachusetts Department of Education Winter 1971





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### KALEIDOSCOPE 4

A Descriptive Collection of Promising Educational Practices

Winter 1971

Edited by

Barbara Kaulman

Beverly Lydiard

Commonwealth of Massachusetts
Department of Education
Division of Curriculum and Instruction

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3

### Introduction

The second of th

To after this search, rAhills of the scribes a number of profitting educational practices which are being used with none teaper of success here in Mansachusetts. They were compiled with the help of a statewide communications betwork called TNDOS and many others in the field who took the time to send information to is. rAhillosioPD = is not meant to be a document that sits on a shelf and collects just; its isefulness depends entirely on active follow-up by its readers.

ALBITIONCOPE can be a valuable tool to those who want to keep alreadt of the ways in which different school systems are instituting new programs and solving problems in areas such as special education, overcrowding, public relations and student unrest. Spiraling education costs have generated a new section on school management which includes an out-of-state model for extending the school year.

A majority of FALEIDOSCOPE 4 reports are based on inexpensive administrative and structural innovations, including new ways of using student teachers, para-professionals, and school and community facilities. The success of these programs and their spinoff projects remind us that simple structural changes are often a key to flexibility, creativity, and individualized instruction in the classroom.

To those who feel their programs are as innovative or as effective as the ones we have included in this KALFIDOSCOPE, we say, "Please tell us



alout we man grows are some would be cappy to include them In a future is create The programs be smilled here are those which have some to some attention, representing all levels and rates of changes

This year we hope to publish two or three more increased radialization. The halfill and to gher education. When approximately one quarter of a million young people in Massachusetts never finish high school, alternatives to traditional high school and college programs must be considered. We would like to hear about informal and formal adult education programs, vocational school programs for adults and other groups offering imaginative experiences in continuing education. We would also like to hear about college, junior college and university programs.

KALEIDOSCOPE 5 will be similar to KALEIDOSCOPE 1, 3 and 4 -- a potpourri of educational practices in grades K-12.

We welcome ideas for future KALEIDO-SCOPE articles from everyone, even if it only means a phrase, a name and a phone number. When a project is not reported in KALEIDOSCOPE, it goes into a data bank which is often referred to when questions come in. Even if your "Innovation" resembles something which has already appeared in a KALEIDOSCOPE, we are glad to receive it; similarity of context (size of community, geographical location, etc.) are often as important as the subject matter itself. A "Kaleidoscope Lead Report Form" and a "Kaleidoscope Comment" form are included at the back of this

Many frustrated teachers and administrators would desperately like more time, training, and materials for innovation. Information sharing, then, is vital, for educators cannot afford unlimited trials and errors. The Bureau of Curriculum Innovation can belo in several ways.

Pirot, we hope to organize a visiting the pulse for radial width projects sometime in the late spring of 1971. (Fleads indicate your interest in a particular visiting scheme on the "raleidoscope Comment" form in the back of this book.)

The bureau is also collecting information in particular about open schools, minority programs, and internal as well as external school communications systems, in order to provide you with comparative facts and solutions. We would appreciate any individual samples or descriptions our readers can send us.

We would encourage school systems who have not already done so to set up mechanisms for dealing with the public. Newsletters, program brochures, training sessions, school tours, open houses, public relations personnel, slides and films are a few of the many ways in which schools can share their projects with local parents and citizens, outside administrators and teachers, state and federal departments, and the general public. Accountability is not just the latest term for educators to play with; specific mechanisms for evaluation are increasingly necessary if schools are to secure local, state and federal funds. Measurable results add great impetus to the support and spread of any worthy practice.

Progress cannot come without change, but change does not necessarily bring progress. Positive change strikes at the root of some basic educational need; it requires considering alternatives, and consulting those who will have to live with it, whether teachers, parents or students. To report such change is the intent of KALEIDOSCOPE.

Robert A. Watson, Director Bureau of Curriculum Innovation

ERIC

### Note

The stands to some and and new tearning opportunities for creativity and showledge. It is a statewide magnification network with representatives in most school systems. A list of of the appriliating area consultants is given in the back of this book; teel free to call on them for further information about this dissemination program or to inquire about your local UNLOCK representative. KALEIDOSCOPE is published two or three times a year as reports from local and area UNLOCK representatives and others accumulate.

#### How to Use Kaleidoscope

We want to call the reader's attention to the Index by Grade Level and Index by City, Town, and Region at the back of the book.

Abbreviations include: UNLOCK, a member of the UNLOCK network (see above); Dept. of Ed., a member of the State Department of Education; ESEA, Elementary and Secondary Education Act; HDEA, National Defense and Education Act.

School systems represented in KALEIDOSCOPE should feel free to reproduce any report for wider distribution. Simply credit this publication.

Most importantly, get in touch with a report's Information Contact if you think the program has some merit for your own situation. These people are happy to share their experiences.

#### Acknowledgements

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teve Van Meter.

The ing: Betsy Tushman and Barb Kaufman

Special thanks to the local CNLOCK representatives and to Department of Education staff members who contributed greatly to this entire enterprise.

#### Distribution

KALFIDOSCOPE 4 has been distributed to superintendents and principals of public, vocational, and parochial schools; representatives in 40 colleges and universities in the Commonwealth; presidents of the Massachusetts Teachers Association and the American Federation of Teachers; those private schools in the state belonging to the ISAM and NEACSS; school committee chairmen; education directors of community action programs; representatives of the news media; interested parents and teachers; and many others, including those mentioned in this issue.

You may add your name to our mailing list for KALEIDOSCOPE. Write the Bureau of Curriculum Innovation.

Additional copies may be obtained from the Bureau of Curriculum Innovation, 182 Tremont Street, Boston 02111, 617-727-5790

#### Cover

Students and a staff member put together a turkey skeleton—one of the many projects at Needham's Science Center, described in this issue. (Photo by Chalue)

6 iv

### **Table of Contents**

Introduction
Note
Table of Contents

I.

CHANGES IN THE SCHOOL ENVIRONMENT	
A. Administrative and Structural Variations	
<ol> <li>Education Without Walls, Lexington</li> <li>Team Teaching in an Old Building, Cambridge</li> <li>Middle School Offers New Learning Opportunities,         Ashlana</li> <li>Senior Year Studies, Weston</li> <li>FOCUS, Stoughton</li> <li>Learning Team Concept, Masconomet Regional JHS</li> <li>Computerized Modular Scheduling, Cohasset</li> <li>Convertible Learning Centers, Quincy         See also: 14, 16, 19, 25, 33, 38, 40, 48, 53,         59, 60, 81, 85, 92, 95, 96, 97, 102</li> </ol>	1 2 3 3 4 5 6
R. Supporting Innovation/Professional Development	
9. Curriculum Councils, Winchester 10. Creative Language Arts, Agawam 11. Do-It-Yourself Advisory, Cambridge 12. Community School Planning, Chicopee 13. Title I In-Service Training, Brockton 14. Differentiated Staffing, Amherst 15. Share-In Day, North Andover 16. Peace Corps-Teacher Corps, Worcester 17. Project Repaid, Westwood 18. In-Service for Administrators, Boston 19. Student Team Teachers, Brookline See also: 6, 44, 52, 95, 97	7 8 9 10 11 11 12 13 13
C. Parents/Communication	
20. Student-Parent Exchange, Hamilton-Wenham Regional HS 21. Parent Volunteer Group, Sudbury 22. Parent Workshops in Speech Therapy, Acton 23. School Advisory Council, Roxbury 24. 700 Volunteers, Worcester 25. Volunteers Establish New Libraries, Boston 26. Volunteer Teacher Aides, Rowley See also: 12, 27, 35, 37, 44, 49, 50, 51, 83,	15 16 17 18 18 20 21



D.	Student Involvement			
	27. Project PRIDE, Newburyport 28. Student Tutors for Math, Needham 29. Student-Sponsored Legislation, Hyde Park 30. F.T.A. Volunteers, Swansea 31. Youth Tutoring Youth, Roxbury 32. TeenAgers Serving Kids, Brookline 33. Seminar Day, Framingham 34. Video Motivation, Cambridge 35. Demonstration Against Drug Abuse, Norwood 36. Learning by Teaching, Brookline 37. Mini Peace Corps, Jamaica Plain See also: 1, 4, 5, 20, 24, 44, 46, 50, 51, 52, 56, 59, 60, 67, 77, 79, 87, 92, 95, 97	22 23 24 25 26 27 28 28 29 30		
GU	JIDANCE AND SPECIAL NEEDS PROGRAMS			
E.	Special Education			
	<ul> <li>38. Regionalized Special Education, Ashland, Holliston, Millis</li> <li>39. Vocational Training for Educable Students, Framingham</li> <li>40. Integrated Special Education, Fitchburg</li> <li>See also: 17, 72, 75</li> </ul>	31 32 32		
F.	Other Children with Special Needs			
	41. ESL Program, Lawrence 42. Bilingual Education, Framingham 43. Program for Perceptually Handicapped, Marblehead 44. Mini-Gym Motor Development, Acton 45. S.E.E.K., Easthampton 46. Elementary Pupils Help Pre-Schoolers, Lynnfield 47. Project Mainspring, Waltham 48. A Second Chance, Gloucester 49. Project Realization, Needham See also: 3, 13, 22, 63, 69, 72, 81	33 34 35 36 37 38 39 40		
G.	• Guidance			
	50. Junior High Handbook, <i>Tantasqua Regional HS</i> 51. Computer Assisted College Selection, <i>Newton</i> See also: 3, 5, 33, 48, 49, 63, 65, 66, 69,  72, 75	4) 4)		



II.

8

### III. CURRICULUM AREAS

н.	Humanities/Art/English/Media/Music			
	52. Concord Consortium, Concord 53. Enrichment Program, Conway 54. Art in Interdisciplinary Learning, Attleboro 55. Art Spills Over into the Classrooms, Lincoln 56. Murals by Students, Cambridge 57. After-School Art Program, Boston 58. Bible as Background for Literature, Newton 59. DECK Plan, Marblehead 60. Media Study Broadens Curriculum, Concord 61. Music Week, Holliston 62. Operatic Happening, Newton See also: 1, 4, 5, 9, 11, 27, 33, 34, 37, 45, 88, 83, 92, 94, 95, 96, 97	43 44 45 46 46 47 48 49 50		
ı.	Health/Physical Education			
	63. Comprehensive Drug Education, Rockland 64. Birth of a Drug Program, Amherst-Pelham Regional HS 65. K-12 Health Education, Worcester 66. Socio-Biology, Braintree 67. Lifetime Sports, Ware See als: 17, 35, 44, 47, 49	51 52 53 54 56		
J.	. Vocational Eduction			
	<ul> <li>68. Foods Service Training Program. Needhan</li> <li>69. Work-Study Program, Fitchburg</li> <li>70. School Typewriters Used at Home, Southwick</li> <li>71. An Historical Restoration, Nashoba Valley Technical HS</li> <li>72. Diversified Occupations, Charles H. McCann Vocational—Technical HS</li> <li>73. Computerized Investing, Acton-Boxborough Regional HS</li> <li>74. Graphic Communications, Hingham</li> <li>75. Exploratory Vocational Training, Blue Hills Vocational—Technical HS See also: 1, 3, 39, 48, 97</li> </ul>	57 58 58 59 60 60 61		
ŀ	C. Science/Environment/Math			
	<ul> <li>76. Science Center for Suburban and City Children, Needham</li> <li>77. Bird and Nature Museum, Athol</li> <li>78. Marine Science: A Pilot Program, Revere</li> <li>79. Conservation Corps, Barre</li> <li>80. An Outdoor Classroom in Hartsuff Park, Rockland</li> <li>81. Children Exchange Environments, Springfield</li> <li>82. Arithmetic Games, Otis</li> <li>See also: 8, 28, 34, 73, 95, 96, 97</li> </ul>	63 65 66 67 67 68 70		



	Soci	al Studies		
		tilent: Explore Community Economics, Winchendon	70 <b>71</b>	
		"Ini Jurses in Social Studies, Cohasset	72	
	··· •	antal Indian Culture, Otis	72 73	
	•• ••	ixth Graders Examine Local Government, Springfield	7 S	
	· · · ·	Multi-Media Approach to Cultural Studies, Chelmsford Man: A Course of Study, Mt. Everett Regional HS	75	
	•	See also: 1, 4, 5, 8, 29, 33, 34, 37, 45, 52,		
		81, 95, 96, 97		
	H. Feat	ling/Elementary Language Arts		
	na.	Comprehensive Reading Program, Everett	76	
	n:.	Typing for Elementary Children, New Bedford	76	
	n	Friday Films, Spencer	77 78	
	23.	Elementary Creative Dramatics, Waltham	78 78	
	34,	Paperback Productions, New Bedford  See also: 5, 8, 10, 15, 17, 25, 26, 36, 41, 42,		
		46, 47, 95		
IV.	EXPERI	MENTING WITH THE TOTAL PROGRAM		
	95	Budget Cutback Spawns Innovative Program, Littleton	79	
	96.	More Options for Students, Northfield	82	
	97.	Education School and Community Work Together, Cambridge	84	
٧.	SCH00L	MANAGEMENT		
	99.	PPBS, Brookline	87	
	99.	Computerized Bus Scheduling, Acton	88	
	100.	Centrally Prepared School Lunches, Concord	90 91	
	101.	Cooperative Data Sharing, 23 towns	92	
	102.	Extending the School Year, Lockport, Illinois		
			95	
Lis	of Are	a Unlock Consultants	96	
How to Multiply an Innovation				
haleidoscope Lead Report Grade Level Index				
City, Town and Region Index				
*aleidoscope Comment				



"In this world the great thing is not so much where we stand, as in which direction we are moving."

· Lord Byron

## Changes in the School Environment

### A. Administrative and Structural Variations

# Education Without Walls

LEXINGTON SENIOR HIGH SCHOOL, 251
Waltham St., Lexington
Superintendent: Ralph J. Fobert
Reported by: Carol Kellogg, Department
of Education
Information contact: Dixie Noftsker
and Fred Boyle, 617-862-7500 x325
Administrative contact: Laurie L.
Harris, Assistant Principal, 617862-7500 x225

Dissatisfaction with regular course offerings has given rise to an innovative curriculum and outside-the-schoolwall activities for 160 juniors and seniors in Lexington's Education Without Walls Program.

Summer workshops in 1968 and 1969 were devoted to setting up administra-

tive procedures and curriculum. Based on the assumption that rarely can stuents' needs be met within the physical and psychological confines of the school classroom, the program professes flexibility and individuality as its dual objectives. Each student designs his own program to meet his needs. If the personnel and facilities of the school don't satisfy his needs, EWOW helps find alternatives.

Aside from hours in English and U.S. History required by the state, the EWOW curriculum is comprised of a number of half-semester electives. Some periodic activities are required of all EWOW students such as discussion groups, film viewings and field trips. Examples of courses are: Film Making; The Psychology of Violence; Prisons, Jails, and Reformatories; The Black Man Revolts; Oceanography; Retail Merchandising; American Music

Seminar; Caste and Class in America. Many students supplement their EWOW courses with more traditional courses in such fields as science, mathematics and foreign languages, as well as with independent study programs.

To complete his schedule, each student selects an afternoon activity that is of interest and value to him. Many students have paying jobs at various business establishments in the area. Two girls raised enough capital to rent a store, acquire stock, and advertise their own boutique which has been operating since the fall of 1969. Others have made a feature-length film, studied computers, managed a gas station, and worked with the Theatre Workshop Company. Some use the afternoon to take courses from the regular school curriculum.

Response to the program has thus far been encouraging. Students have participated actively in its development. Many new students have joined the program since it began, while only a small number have found it unsuitable to their needs.

Date project operational: 1969
No. of students involved: 160
Approximate yearly cost: None extra
(Staff: 4 full time, 15 part time)
Source of funds: School budget

### Team Teaching in an Old Building

RUSSELL SCHOOL, 115 Larch Rd., Cambridge 02138

Superintendent: Francis Frisoli
Reported by: Henry J. Morris, UNLOCK;
Bert Giroux, Public Relations
Information and administrative contact:
Ed Murphy, Principal, 617-876-4500
x286

The Russell Elementary School Building may be archaic, but its educational outlook is quite modern. Third grade classes have piloted a team teaching program that will be continued and ex-



panded when the new John M. Tobin School is completed in 1971.

Teachers Marilyn Gay and Pamela Stout approached their principal in the spring of 1969, and asked if they could plan for team teaching in the fall. This required some space hunting, in an old school where third grade teachers were located at different ends of the hall. To support the teachers' efforts, however, Principal Ed Murphy moved the two third grade classes to rooms at the same end of one hall, facing each other. A dead-end corridor space between them was immediately decorated, and now serves as an area for small group learning, practicing plays, and art activities. Mr. Murphy was also able to coordinate released time for the two teachers, so that they could plan together.

Other compensations for the building's 1897 design include a constantly changing pattern of desks, which the students often move for various activities, and "interest centers". Tables and shelves placed around the room hold materials designed to motivate and stimulate a child, such as fossils and manipulative math games. Student teachers and parent volunteer aides, by reducing the pupilteacher ratio also increase flexibility and individualize learning.

For the first four weeks, the two

third grades only met together for large group activities. While everyone became accustomed to moving back and forth, students were tested for reading and math ability groups. After intensive evaluation they began to travel independently from area to area during these periods.

By the end of the first trial year, team teaching techniques and methods were in full operation, and were favored by principal, teachers, parents and students. They were picked up easily the next year by a new third grade teacher, and by the fourth grades. The fifth grades plan to continue this pattern next fall.

Date project operational: Fall 1969 No. of personnel involved: 40 Approximately yearly cost: None extra

# 3. Middle School Offers New Learning Opportunities

ASHLAND MIDDLE SCHOOL, 90 Concord St.,
Ashland 01721
Superintendent: David Mindess
Reported by: Barry Ruthfield, Principal
Information contact: Ernest Zaik, Curriculum\_Coordinator, 617-881-2131
Administrative contact: Barry Ruthfield,
617-881-2126

In 1966 the Ashland Public Schools established a Middle school to provide more individualized instruction and to make better use of existing buildings.

The many architectural and financial advantages of putting all fifth through eighth graders under one roof allow full programs in guidance, laboratory science, remedial and developmental reading, speech therapy, language labs and a host of other areas. A pooling of staff talent provides teacher specialization, core programs, multi-grading, large group instruction, more attention to lividual differences and greater

One popular result of this reorganization is the instructural materials center, combining library and audiovisual resources. With a school population of 862 students, the librarian reports that 2000 books circulate monthly.

Recently a pilot program opened new avenues for understanding the community; on an average of once a week, boys who are disinterested in formal school learning go out to investigate career possibilities in local industry with the industrial arts teacher.

Date project operational: 1966
No. of students involved: 862
Approximate yearly cost: None extra
Dissemination materials available:
Filmstrip of instructional materials center.

#### 4. Senior Year Studies

WESTON HIGH SCHOOL, Weston
Superintendent: Philip A. Wood
Reported by: Joe Emerson, Faculty CoChairman
Information and administrative contact:
Joe Emerson, 617-899-0620

When students asked for a Senior Year Studies Program, the administration and faculty at Weston High helped them set it up as an experiment. Designed to encourage individual creativity, the program serves as a transition; seniors long familiar with structured high school courses can try the more independent types of work expected by colleges.

For the second semester or fourth quarter of the academic year, seniors may replace one or two full-credit courses by submitting contracts to a reviewing committee. These performance contracts must be studied and reasonable proposals, for they must convince the committee and teachers whose courses are being dropped, that independent study will provide worthwhile learning experiences. Planning, then, is an im-

portant part of each project's educational value.

The committee includes faculty, students and the principal. Together they help draft proposals in contract form, as well as approve, record, evaluate, and award credit for projects. Meeting regularly with one member of the committee, and with an adult advisor associated with the project, a student may use a seminar form, some relevant work experience, formal study at a nearby institution, or an independent research approach.

Evaluation is another key element of the programs. Students present a brief written report and some "final product" (in the form of a recital, a paper, a biography, etc.) to the entire committee. The committee asks for feedback from students on its own operations, too, so that it may improve its service the following year.

Projects varied widely. Many students taught classes or worked at hospitals and institutions. One boy prepared for college auditions on the double bass, and another studied music composition at Brandeis University. Trainees were accepted at a local photography shop, the local paper, and a rat experimental lab at Massachusetts General Hospital. Films, a play and a literary magazine were also produced.

Date project operational: Fall 1969
No. of students involved: 33(1st
year)
Approximate yearly cost: None extra
Dissemination materials available:
8-page guideline for students

#### 5. FOCUS

344-4000 ×58

CHEMUNG HILL SCHOOL, 1800 Central St., Stoughton 02072
Superintendent: Joseph H. Gibbons
Reported by: Carol Kellogg, Department of Education
Information and administrative contact:
Mrs. Helen Hansen, Principal, 617-

For the past neven years, Chemung Hill School has set aside several weeks in the spring for the whole school (grades K-6) to work together on an interdisciplinary project dealing with a central theme. "Map Reading", "The Ocean", "Flight", and "Conservation" have all been themes in the past.

Last May the students selected and focused on the theme "Occupations". For three weeks a greatly varied program presented speakers, including many parents, who came to talk about their own occupations. Children explored their community's court nouse, town hall, library, police and fire stations, vocational school, and their Careermobile. All children viewed a film, "Careers in Health." In addition to the large group field trips, smaller groups of 5-10 children visited professional people in small local businesses and observed them involved in daily tasks. Excursions were supervised by parents and took place during the school day.

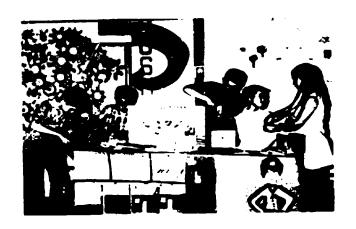
Particularly noteworthy during the Occupations program were the related cultural activities. Crildren read or listened to Walt Whitman's poem, "I Hear America Singing," listened to the music from Dukas' "Sorcerer's Apprentice," sang occupational folk songs and did a good deal of creative writing. One of the students' favorite activities was having a different class dress a life-sized dummy in a different uniform each day, and wheel it around from room to room for others to guess the occupation represented.

The three weeks culminated in an Occupational Fair. In preparing for the Fair each class was paired with another: grades 1 and 4, grades 2 and 5, grades 3 and 6 and the kindergartne and grade 6 came together approximately one-half hour each day to work on their projects.

Children showed their parents a variety of art and creative writing projects. A large mobile, puppets, digramas, a mural and other original creations set the scene as children played occupational roles in demonstration booths.

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15



On the final day over 600 youngsters enjoyed a picnic with their parents. Everyone wore handmade hats depicting an occupation of the past, present, or future.

Date project operational: 1963
No. of students involved: 600
Approximate yearly cost: \$25 (materials)
Source of funds: School budget

### Learning Team Concept

MASCONOMET JUNIOR HIGH SCHOOL, Boxford,

Superintendent: Glen Fay

Reported by: David A. Jackman, Department of Education

Information contact: Jim Dodge, teacher,
617-887-2328

Administrative contact: Bruce Bears, 617-887-2328

When the doors opened this September at Masconomet Junior High, very little remained the same from the previous year. Traditional block scheduling was scrapped, bells were silenced, study halls eliminated, and all were replaced by school-within-a-school team learning. Within one month another change was evident; morale among teachers and students was at an all time high, according to Jim Dodge, teacher and leader of the original "curriculum" mmittee".

A team of "major" outject teachers, supported by "minor" outject personnel, is responsible for each heterogenous group of 120 students. Each team does its own grouping, draws up its own schedule, determines its own disciplinary procedures, and elects its own team leader. To maintain a more equal relationship with their team, these leaders unanimously elected to refuse a salary differential. Each team also has its own block of classrooms.

Mr. Dodge reported that not only is interaction among teachers high, but the discussion is focused on the students rather than subject matter. From time to time the whole team meets together to allow teachers and students to voice problems and let off steam. The only constraint on scheduling is that one hour is set aside every day for school-wide electives, such as band, clubs, etc.

The team learning was instituted at no-cost to the school through grass roots involvement. For fifteen months an all-teacher "curriculum team" gave time freely to work out plans; frequently as many as half of the 50-man staff attended these after-school meetings, which were free of any control on the part of the principal or superintendent.

Another prime factor that determined the course and success of the planning was the need to conserve time and to use it more effectively in more concentrated blocks. This orientation helped pull the staff together and eventually led to a truly flexible schedule.

Where does the committee go next? Mr. Dodge explained that teachers now want to improve the curriculum, with the help of the students. The new staffing pattern and open atmosphere which the group has worked out will greatly facilitate changes in course content.

Date project operational: September 1970

No. of students involved: 720
Approximate yearly cost: None extra

#### 7. Modular Scheduling

COHASSET HIGH SCHOOL, 143 Fond O...

interest in the

Jiq enforten imit Nelson Megna Reponte i by: John M. Shaw, Curriculum

Information contact: William McCallum Lirector of Special Services, 617-383-0023

Administrative contact: John M. Shaw

Scheduling flexibility is achieved at Cohasset High School (grades 7-12) by dividing each school day into 18 modules of 22 minutes each, including an activity period at noon. At the beginning of the school year, teachers designate the number of mods they want for their classes each day, and a computer sorts and assigns the teachers and students into time slots.

Major subject areas meet for at least ten mods per week, but these can be arranged any way the teacher wished. The rationale is that some topics lend themselve, to longer or shorter mods. For example, science personnel prefer three consecutive mods per day, three days a week, for labs and one mod for review; senior English and social studies meet for a different number of mods every day; art and industrial arts prefer three mods at a time; calculus likes four; and the language lab, one. The schedule rotates each day so that the same consecutive modules never meet at the same time on two consecutive

Since the program began in 1968, reception by the teachers has been mixed. More teachers are taking advantage of the opportunities for flexibility every year, but half of the teachers still prefer a traditional two mods per day, five days per week. Those operating the program feel it would be difficult—if not impossible—to run without computer assistance.

Date project operational: 1968
No. of students involved: 800
Approximate yearly cost: Included in \$2,300 budget for computerized scheduling
Source of funds: School budget

## 8. Convertible Learning Centers

GRIDLEY BRYANT SCHOOL, 111 Willard St., Ouincy 02169

Superintendent: Lawrence P. Creedon Reported by: Patricia Drew, Teacher, Reading Center Coordinator Information contact: Patricia Drew,

617-773-5890

Administrative contact: Charles
Bernazzani, Principal, 617-773-5980

Despite an antiquated building(built in 1895) and crowded conditions, the Gridley Bryant School has succeeded in setting up three learning centers which offer students in grades 2-6 a kaleidoscope of learning activities in the areas of math-science, language-social studies and reading. Utilizing a small budget for renovations, the school created a reading center which doubles as the school library. This center is located in the former school auditorium, enlarged by breaking down the wall of an adjoining classroom. Desks were rerlaced with tables and chairs. The mathscience and language-social studies centers were made in a similar manner, by breaking down portions of walls separating two large classrooms.

In groups of about 100, all students are scheduled into each of the three learning centers for an hour every morning. Three teachers, assisted by one para-professional aide and student teachers from nearby cooperating colleges, staff each center. Programs in reading, math and language are skillbased. Students have been diagnostically tested, and each student is shown a variety of materials he can work with to strengthen his areas of weakness. The science and social studies programs utilize the inquiry approach -- with plants and animals--and also delve into topics such as law and social responsibility, economics and black studies. The programs in all three centers focus on meeting the needs of individual students rather than grade level requirements.

During the afternoon, Cinderella's

coach becomes a pumpkin again as the learning centers revert to self-contained classrooms -- two in the mathscience center, two in the social studies-language center. The reading center continues to function as a place where students needing extra help can receive it.

Staff members visualize use of the learning centers as a method of gradually changing a traditionally-organized school into an ungraded, "free flow" school with more and more emphasis on individualized programs. This entails giving each child more and more responsibility for his own learning and for evaluating his own work.

Date project operational: September 1970 No. students involved: 200 Approximate yearly cost: \$2,000 (plus \$4,000 one-time expense for building renovations)



Source of funds: ESEA Title III and Experimental Textbook & Learning Materials Budget for City of Dissemination materials available: Brochures available to Learning Centers visitors--open to visitors a.m. only

### B. Supporting Innovation/ **Professional Development**

#### 9. Curriculum Councils

WINCHESTER PUBLIC SCHOOLS, 15 High St., Winchester 01890 Superintendent: Donald A. Klemer Reported by: Walter P. Gleason Information and administrative contact: Walter P. Gleason, Assistant Superintendent for Curriculum, 617-729-8103

The perennial problem of curriculum development and coordination is being handled for grades K-12 in the Winchester Public Schools by permanent Curriculum Councils in each subject area. Two teachers representing the elementary schools (primary and intermediate), one from the junior high and one from the high school serve on councils for Language Arts, Mathematics, Science, and Social Studies. The Foreign Languages Curriculum Council includes representatives from only the junior and

senior high schools. Department Heads are chairmen of the councils.

Chosen by a committee of principals who review the qualifications of teacher applicants, the Councils are expected to monitor the results of curriculum, to be aware of curriculum changes throughout the country, to construct and recommend curriculum as a result of assessed need and available materials, and to train teachers in using the curriculum.

In each elementary school and in the junior high, one curriculum specialist in each subject area is appointed by the principal to act as a curriculum advisor in residence to the teachers and principal of his school, and to serve as a liaison between the school and the Curriculum Council. These lia-



18

ison people disseminate information, answer questions about the programs and find out and inform the Councils of difficulties teachers may be having with the program; other duties include identifying instructional concerns for Council discussion, collecting data from curriculum tests, and obtaining teacher reactions to new texts and materials offered for inspection by the councils.

The Curriculum Councils meet two days a month for the entire day while substitutes take the classes of member teachers. Each Council also works four weeks during the summer. The 19 Council members each receive a stipend for extra responsibility (3% of the master's degree maximum) plus additional working pay for a 43-week year. The liaison people receive a stipend of \$200 each. One full-time clerk serves the five councils.

During their first year of operation, Councils examined and evaluated existing curriculum. They are currently working out goals for each subject area indicating the expected behavior at each grade level. The next step will be to establish performance criteria in the form of standard tests and standard observations.

The Councils have now produced a number of multi-activity kits (mostly for grades K-6) to go with the curriculum in science, social studies, math and English. The kits include instructional materials, tapes, films, film strips, etc. and they are scheduled out to the teachers.

Winchester's Division of Instruction is hoping to develop ways in which these kits, as well as the curriculum-making potential of the program can be shared with other towns.

Date project operational: 1965
No. of students involved: 5000
Approximate yearly cost: \$65,000
(\$40,000 personnel, \$25,000 materials)

Source of funds: School budget
Dissemination materials available:
Detailed description sheet.

# 10. Creative Language Arts

AGAWAM PUBLIC SCHOOLS, Agawam 01001
Superintendent: James Clark
Reported by: Joseph F. Comerford, CoDirector, 413-568-3311
Information and administrative contacts:
Joseph Comerford, Donald Landry, CoDirectors, Westfield State College,
Westfield 01085

About 30 Elementary teachers and principals of the Agawam Public Schools participated in an in-service language arts course conducted by Drs. Joseph Comerford and Donald L. Landry of Westfield State College.

The course was expressly designed for the Agawam school system, and teachers were asked to suggest specific areas which they would like to explore during their fifteen weeks of study. These included creative writing and poetry, linguistics and grammar, spelling and vocabulary development, listening techniques, oral language and literature, and media study. Drs. Comerford and Landry covered these topics in group discussion meetings; between sessions, teachers from various schools met in small groups to report and display how they had applied their new knowledge in the classroom.

A language arts fair served as the culminating activity for the course. Parents, students, and fellow teachers were invited.

All those who took the course completed a follow-up evaluation questionnaire. Teachers indicated the course had stimulated excitement and new ways of thinking about language arts. They felt information had been shared among all schools and diciplines(one of the program's main objectives). Several faculty members mentioned they planned to continue the fair annually in their own individual schools. One teacher reported, "This is the way an in-service workshop should be given - in an area where teachers want help, and in the school plant itself."



Date project operational: February
1970
No. of personnel involved: 35 teachers
Approximate yearly cost: \$1,000
(school supplies)
Source of funds: School budget

### 11. Do-It-Yourself Advisory

CAMBRIDGE FRIENDS SCHOOL, Cambridge 02138 (Independent)

Reported by: Carol Kellogg, Department of Education

Information contacts: Bisse Bowman,
Cambridge Friends School, 617-3543880(home: 617-876-8381); Adelaide
Sproul, Shady Hill School, 617-8681260(home:617-354-7369); Chris Stevenson, Fayerweather St. School, 617876-4746

A group of teachers from independent schools interested in making their classrooms more "child-centered" gathered last May to see how they could call upon one another as resources. Thus was born the Do-It-Yourself Advisory. This self-help program is open to all who feel they can gain from and/or contribute to the needs of others in similar situations.

A program of workshops and seminars was set up for the fall, including an evening series dealing with parents' anxieties, a seminar on schools without walls, four sessions devoted to manipulative math materials, an informal chat and a look at an on-going open classroom, and weekly self-help workshop emphasizing relevant literature. Another workshop will run February through April on Tuesdays in math, dance, science, arts, crafts, etc.

These meetings are planned and conducted mainly by teachers on a volunteer basis. While meetings are usually held at Shady Hill School, Fayerweather Street School and Cambridge Friends School, some carpentry sessions are held in a headmaster's basement. Public school teachers have now joined the up and plans are in progress to use ERIClic school space as well.

In addition to sponsoring evening workshops, the group includes teachers in the areas of art, music and open structure classrooms who have made themselves available as general consultants easily reached by phone.

"Open structure education is defined in no specific way as far as we are concerned. It may relate to Leicestershire, integrated day, humanistic education and other phenomena which are at present 'unlabeled'. We are impressed with the need and importance of the growth of each of us and you, so Do-It-Yourself Advisory exists to serve that function," writes the three originators of the program.

Date project operational: September

No. of personnel involved: 150 teachers
Approximate yearly cost: \$300
(materials)

Source of funds: Dues/donations
Dissemination materials available:
Project outlines and descriptions
(ditto)

### Community School Planning

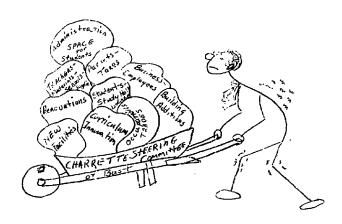
CHICOPEE PUBLIC SCHOOLS, 141 Grape St., Chicopee 01013

Superintendent: George E. Membrino
Reported by: William E. Mielke, Director

Information and administrative contact:
William E. Mielke, Coordinator of
Secondary Education, 413-594-9211

As one of ten public school departments in the nation to receive an Educational facilities Charrette grant from the Office of Construction Services, Department of Health, Education and Welfare, the Chicopee public schools organized a week-long conference of educators, architects, city planners, economists, local public officials, citizens, teachers and college and high school students to spend a week together studying the problem of overcrowded secondary schools

and seeking a workable solution. Previous to the <u>Charrette</u> grant, all new school facilities would be planned entirely by city and school administrators. The new process involved the community in decision-making.



Prior to the conference, participants had read materials reflecting new ideas for curriculum, occupational education and facilities. Some issues discussed at the conference were: traditional vs. comprehensive education with more relevant 'trade' courses, flexible scheduling, optional study halls, semester courses, a campus complex of buildings, renovations, athletic fields, additional classrooms, consequences of a third high school and many other local issues.

While the conference generated a great deal of understanding and respect for different points of view, it did not produce the expected concensus of opinion on how to solve the problems of crowded schools. Several plans were submitted, however, and the Steering Committee chose the least expensive one suited to modern curriculum.

Particularly noteworthy was the active participation of those whose education was under discussion—the students. Many more than the officially invited students came and took part in some heated discussions such as "the good old days vs. the relevency of today."

Although all solutions sought were not found, the <u>Charrette</u> process of public involvement and participation

provided impetus for new programs and a new awareness of secondary school problems; some of the educators who were the most traditional are now champions of the new approaches.

Date project operational: September 1970

Approximate cost: \$10,000 Source of funds: HEW, Office of Construction

### 13. Title I In-Service Training

SPRAGUE SCHOOL, Brockton 02402
Superintendent: Anthony D'Antuono
Reported by: Richard Buckley, Coordinator

Information contact: Richard Buckley,
617-588-0351

Administrative contact: Daniel Kulick, 617-588-0351

In-service training for Brockton's Title I program staff has focused on specific local needs. The teachers and aides working for three years on Title I projects have been directly involved with the so-called "disadvantaged" child, an yet their experience and background have given them no special training in that area. An in-service program was set up in 1969 to begin such training. Its main goal has been to "develop and deepen the participants' knowledge and understanding of the 'disadvantaged' child"

Coordinator Richard Buckley used Title I training funds to set up a series of 20 sessions for Title I staff. These sessions included small group discussions led by school guidance personnel, involving teachers, aides, and parents from the disadvantaged areas. Audio-visual media and reading methods and materials were also covered.

Reactions to these sessions are being evaluated by an outside consultant, for continuous program improvement. In the past year, the program has cen-



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...: nerational: 1969 The firmonial involved: 47

And the firm property cost: \$1,000(part)

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### 14. Differentiated Staffing

AMMERST PUBLIC SCHOOLS, Town Hall,

Amberst 01002

Superintendent: Ronald Fitzgerald Perceted by: Donald Frizzle, Assistant Superintendent

information and administrative contact: ionald Prizzle, 413-549-3690

The Amherst experiments with differentiated staffing are now in their second year. All five of the first year voluntary differentiated staff "teams" are continuing, and five new ones have heen started at the new Wildwood Elementary School. In all, some 2000 students are now affected in one or more subjects.

Individualized instruction, of course, is a major goal, and one means of a achieving this is to organize staffing in such a way as to reduce the pupilstaff ratio. A firm rule in Amherst, however, is that cost shall be no more than traditional staffing. The opportunity to change staffing patterns arises when new staff positions are authorized, or when a teacher resigns; the other teachers at that level or within that department are given the option either of having another teacher hired or of spending the salary for teacher aides or clerical aides, full-time or parttime.

As teachers assume more responsibility, they may also propose a salary differential for themselves provided they remain within the budget and can justify it with the school board. One team has negotiated a \$1,000 increment for each of its fully professional Richers.

The staff has experimented with various ratios and combinations of teachers and aides. One secondary department includes four teachers and nine student aides. The team began using two or three aides per teacher immediately, and their exper ence has shown that a gradual increase in aides is needed to give teachers time to plan teamwork, and to work out some specialized roles.

Date project operational: September 1969

No. of students involved: 2000 Approximate yearly cost: None extra

### 15. Share-In Day

ST. MICHAEL'S SCHOOL, 30 Merrimack St., North Andover 01845 (Independent) Reported by: Sister Mary Agnes & Sister Mary Chisholm, Consultants Information contact: Sister Mary Fatricia, Supervisor, 617-288-0530 Administrative contact: Sister Maria Wittenborn, Prinicpal, 617-688-0263

Cognizant of the many unique talents of her teachers, supervisor Sister M. Patricia asked, "Why not share?" Teachers responded enthusiastically, and Share-In Day was planned for April 4th.

Fifth, sixth seventh and eighth grade parochial school teachers of Boston combined their efforts to display creative projects in the language arts. Creative writing displays, all beautifully correlated with art works, included free verse and haiku, prayers from the Ark, mod fables and chart talks. Illustrated literary notebooks contained less formal presentations of favorite passages, plot summaries, figures of speech, character sketches and reactions to assigned literature. Panoramas and bulletin board displays were also used and teachers presented various teaching techniques for oral talks, poetry, daily quizzes and grammar.

About 100 teachers participated in the project. The staffs were very happy with Share-In Day, and eager to try more creative writing in the classroom. Date project operational: April 1970 No. of personnel involved: 100 Approximate yearly cost: None extra

### 16. Teacher Corps

WORCESTER PUBLIC SCHOOLS, 20 Irving St., Worcester 01609
Superintendent: John Connor
Reported by: Dorothy M. Davis, Coordinator
Information contact: Cynthia Shephard,
Center for International Education
University of Massachusetts, Amherst
01002 413-545-1562
Administrative contact: Dorothy M.
Davis, 617-798-2521 x33

In the summer of 1969 Senator Edward Brooke announced the award of a grant from the Teacher Corps to the city of Worcester and the University of Massachusetts to develop an African and Non-Western Studies Curriculum to serve as a model for public schools across the country. Twenty-five former Peace Corps volunteers with teaching experience in Africa or other non-Western continents were selected to serve as interns, while five others, holding master's degrees already, are team leaders for the joint program.

The Teacher Corps interns received pre-service training at the University and then served a one-year internship in an inner-city school in Worcester. During the period of the program the Corps members were responsible for developing and presenting a meaningful African Studies curriculum for systemwide use. After the internship they were awarded a master's degree in education and received teacher certification.

The rationale for recruiting individuals who had lived and worked in non-western countries was that such experience is invaluable to teachertraining today, especially for those teaching cross-cultural subjects. It was also felt that the Teacher Corps approach, which requires its members to live and work in the inner-city mmunities they serve, might be a

more effective way to bring change to the schools.

Much of the pre-service work was geared toward sensivity training and micro-teaching experiences. The Corps members also did research on new approaches to curriculum development and began to work on ideas for a curriculum based on their personal experiences while in the Peace Corps.

In January 1970, the interns moved into Worcester and began to work in their chosen inner-city schools. They taught one experimental class a day with a cooperating teacher to introduce the curriculum and work on its development. They also lived in the school community and worked on local projects with the parents and students they taught.

In working out the new curriculum Teacher Corps members chose not to create an elective course in African Studies as other systems had done but to integrate the curriculum into existing Humanities and Social Studies Programs on a K-12 basis. In educational terms, the interns have created an "affective" curriculum dealing with objectives that emphasize feelings, emotions and attitudes. Such techniques as tie-dying, role-playing, telling folktales, dancing, and singing are used as vehicles for appreciating African Culture.

The Teacher Corps program ended as of January 31, 1971 and now operates as an "extern" program with the Corps members working within the school system. In this situation one group will remain in Worcester teaching and working with teachers, community and parents to integrate the African Studies program into the existing curriculum. Another group will move to Miami, Florida to begin to introduce the new program there.

Date project operational: 1969-70
No. of students involved: 1000
Approximate yearly cost: \$98,064 (personnel \$79,063, materials \$19,001)
Source of funds: Teacher Corps
Dissemination materials available:
African Studies affective curriculum

### 17. Project Repaid

VESTWOOD PUBLIC SCHOOLS, 660 High St., lestwood 02090

Superintendent: John F. Tobin Reported by: Mrs. Shirley Walczack,

Director

Information contact: Mrs. Shirley Walczack, 617-326-7500 x33

Administrative contact: C. Lewis Cedrone, Assistant Superintendent, 617-326-7500

Project Repaid used video-tape in a year-round program designed for slow learners and handicapped children. Its summer effort boosted the preparation of 39 students entering first grade,and the school year program provided tutors for 40 students from ages 6 to 15, and the in-service training for teachers. Video-tapes of classes and sessions were played back to students as well as teachers and other interested staff, such as apprentice and student teachers and the school psychiatrist. After the novelty of seeing themselves on television wore off, children formed a stronger sense of their individuality, while the teacher could better appraise her work and the children's response to it. These tapes also provided information and models for teachers, parents, aides and student teachers within the school system and from other communities.

During the summer, children going into first grade whose development in kindergarten seemed slow worked for six weeks on visual motor perception, communication and problem solving skills.Activities included skipping, jumping, throwing balls, dancing, rhythmic movement, obstacle courses, locating parts of one's body and exercises for homolaterality (to make a student, for instance, right-handed, right-eyed and right-footed). The staff also collected diagnostic data for each child, bringing together material for in-service demonstrations, child and teacher evaluations and teaching techniques. Project Repaid also offered parents the chance to participate in education as volun-\_des in class.

After summer students had grown accustomed to the class and the use of video-tape, fourteen sessions and one test were recorded and kept for reference and demonstration. Tapes displayed student behavior and teaching techniques. One recorded a specialist's master class. (A print-out booklet accompanies this video-tape.) Tapes were also used to discover and study behavior characteristics of children with specific handi-

The staff recommended students for the fall tutoring schedule. As in the summer program, objectives were to diagnose each student's primary handicap, to describe an individual program for him and to evaluate various teaching methods for demonstration and distribution in the school. Reading, charades, spelling games, typing and auditory training were some of the means used to engage the learning interest of the students.

The results of the project were manifold: for each student an individual folder of diagnostic and remedial data was compiled; students in need of special services were identified; and plans for in-service presentations to benefit teachers and interested staff were carried forward. The video-tapes proved invaluable as attractive and useful tools for student, teacher and planner.

Date project operational: Summer 1969 No. of students involved: 40 Approximate yearly cost: \$13,435 (primarily personnel) Source of funds: ESEA Title VI Dissemination materials available: Video tapes and print out

### 18. In-Service for Administrators

EDUCATIONAL PLANNING CENTER, 2893 Washington St., Roxbury 02109 Superintendent: William H. Ohrenberger Reported by: Martin H. Hunt, Resource person

Information contacts: Martin H. Hunt & John Halloran, 413-445-4242
Administrative contact: John R. Coakley

Funded by the State Education Professions Development Act, Subpart B-2, the Boston Public Schools have initiated a bi-weekly series of one and one-half hour seminars for a number of middle school, junior high and senior high school principals and headmasters. The primary purpose of the seminars is to provide the participants with an opportunity, on a regularly scheduled basis, to exchange ideas and experiences with one another and with other knowledgeable professionals.

Priority areas of concern include such topics as staff development, improvement of the instructional program, student relations and community relations. The EPC staff feels that administrators should participate in this sort of exchange as well as teachers.

The uniqueness of this program is that the principals and the headmasters themselves have been given the responsibility for its direction. The program's structure, content and resources are being determined by the participants. The Educational Planning Center of the Boston Public Schools developed the proposal for this program and provides two of its staff members as resource persons for the project.

Date project operational: September 1970
No. of personnel involved: 13
Approximate yearly cost: \$1,750
(Personnel)
Source of funds: P.L. 89-10-V-503

### 19. Student Team Teachers

RUNKLE ELEMENTARY SCHOOL, 50 Druce St., Brookline 02167
Superintendent: Robert I. Sperber
Reported by: Mrs. Babette Raphael,
Principal; Mrs. Sally Beckerman,
ordinator

Information contact: Mrs. Sally Beckerman, 617-734-1111 x382

Administrative contact: Anne MacDonald, Assistant Superintendent, Brookline Public Schools, 333 Washington St., Brookline 617-734-1111

A happy combination of philosophy, structure, and personnel produced a unique system for placing student teachers at Runkle School. In an effort to support and promote team teaching methods, the school's principal began to place several student teachers at a time with one classroom teacher. Coordinating teams of teachers and student teachers was a time-consuming task, however, and when a teacher offered her services, the principal gladly turned the job over to her. For several years now, fourth grade teacher Sally Beckerman has handled all student teacher placements.



After determining the numbers and types of student teachers needed each semester, Mrs. Beckerman sends her requests to education schools through the district personnel officer. She interviews all candidates sent to Runkle School, and places one, two, or three students with each teacher, according to student and faculty requests. (Multiplacement is encouraged but never forced on the staff.

Differing university calenders require a staggered schedule, which Mrs. Beckerman has actually found preferable. One student helps the next; they get to know each other, and their cooperation saves the teacher some "breaking in" time.

The placement coordinator acts as a liason between all parties and as an informal, on-the-job methods resource person for students. Problems are ironed out as they arise. One student, for example, reported very negative feelings to her supervisor after her first few teaching days. The supervisor had dealt with Mrs. Beckerman before and called her immediately. Much to everyone's satisfaction the student was placed with another teacher right away.

A key factor in placement coordination is Mrs. Beckerman's role as a teacher. Student teachers can talk freely with someone in a non-evaluating position; fellow teachers feel that their coordinator is easily accessible, and will provide constant feedback; and education school supervisors, personnel staff, and the principal are happy to deal just with one"specialist" for student placement.

A flexible and open school atmosphere is also necessary, for this allows the coordinator some released time as well as the ability to walk into any classroom any time to observe.

Striving for even more careful selection and placement, Mrs. Beckerman encourages education schools to send over junior year observers. Observations help students decide if they really want to teach, what grades and subjects they prefer, and finally if they would like

to student teach at Runkle. To help with these decisions, observers may participate in classroom activities.

This practice results in a group of mutually selected student teachers; student teachers understand school policies and know some of the faculty before they ever begin teaching, while faculty members receive the kind of help most suitable for them. Observation days have paid off in other ways. Students from a math education class become so excited about math materials being used at Runkle, that approximately 30 volunteers now help each semester with individualized math instruction.

A careful placement system increases the probability of a profitable experience for the teacher and student teacher. In fact, several former student teachers at Runkle now enjoy full time positions there. In addition to this obvious advantage, team-teaching students are better prepared for a career in education; student teachers from different colleges are placed together and so may benefit from sharing college as well as classroom experiences; and children enjoy a greatly reduced pupil-teacher ratio.

After a trial period, new students and teachers enjoy working as teams. Heaviest opposition has come from education school supervisors whose evaluation techniques have had to adjust to new teaching techniques.

Date project operational: Fall 1969 No. of students involved: 482 Approximate yearly cost: None extra

### C. Parents/Communication

### 20. Student-Parent Exchange

HAMILTON-WENHAM REGIONAL HIGH SCHOOL, 775 Bay Road, Hamilton 01936 Superintendent: Hammond Young Reported by: Carol Kellogg, Department Clucation Information and administrative contact:
Jerome A. Pieh, Principal, 617-4684491

A first-hand experience in high school education is now available to parents of Hamilton-Wenham Regional High School. In an attempt to erase the generation

gap and to respond to community needs, a program to bring parents and other adults into the school began this fall.

If a student can find an adult, preferable a parent, to take his place at school for a full day twice a year, the student can receive two excused absences. No special events are planned for these visitors and no special privileges are afforded them except that they may opt out of physical education if they wish. Each visitor is provided a schedule to help in finding his way around the school. At the end of the day visitors fill out questionnaires with such questions as "what stands out about your day?" and "What changes would you recommend?" Principal Jerome Pieh reports that some adults have made good suggestions.

Although the program is fairly new, Mr. Pieh feels that the objectives of increased parent-student discussion and greater parent involvement are being realized, and says that it is a very easy program to implement.

Date project operational: October 1970

No. of students involved: 825(potential)

Approximate yearly cost: None extra Dissemination materials available: Project proposal(ditto)

### 21. Parent Volunteer Group

THE FAIRBANK SCHOOL, Sudbury 01776
Superintendent: John O'Neill
Reported by: Dana Kaufman, Teacher
Information and administrative contact:
John Vinagro, Principal, 617-443-9171

Concerned about class size, and what they could do to help reduce teaching loads, Fairbank School parents offered their services to the principal. Together they organized a Parent Volunteer Group which has pleasantly surprised everyone.

Because the school is fairly small (housing approximately 400 pupils from grades 1-5), administration can be

handled on a person-to-person basis, and it requires no expensive training or supervisory staff. Five grade-level coordinators, themselves volunteers, work closely with classroom teachers. After determining what kinds of help teachers need, they delegate telephoning of parents, arranging trips, and classroom aide work. Aides are individually instructed by classroom teachers. Monthly meetings bring the P.V.G. together with the principal for long-range planning.

At the beginning of each year, a list of 80 parent volunteers is drawn up. The list indicated when a parent is available, and what particular talents, interests and experiences he or she may have. With a cross-file teachers can tell at a glance who is a former teacher, who might set ap a science experiment or who is talented in the arts and crafts. Volunteers in turn can refer to a suggestion list for activities that would suit them.

Interested fathers have listed their occupations and schedules, and have also participated in the classroom. Delighted students listened to a father tell them all about computers, and several dads contributed ideas and expertise for the spring Science Exhibition.

Parent volunteers began by helping primarily with work outside the class-room, such as typing assignments; but as good relations were established, teachers, parents and principal moved toward more active classroom participation.

Reading classes used volunteers to simply pass out papers and supplies at first. Next, parents listened to pupils read, and this led to some individual tutoring. Now aides may take over a class while the teacher leads another group in special activities, and parents supervise pupils using a tape recorder and head set for oral reading practive.

Last year parents initiated a pilot program to organize and supervise field trips entirely themselves. With the

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School Committee's approval, a trip to nearby Drumlin Farm was planned for a third grade class. The teacher and parents set a week's schedule in which one third of the class was driven to the farm each day. This allowed both teacher and parents to work with smaller groups. Follow-up activities were planned for the end of the week, and students compared experiences.

Parents have also arranged a book fair, and through personal contacts have found foreign pen pals for several classes. Volunteers run the library, too. Enthusiasm and a real concern for the school are all that is needed for projects to grow and multiply.

Date project operational: Fall 1969
No. of students involved: 400
Approximate yearly cost: None extra
Dissemination materials available:
Suggestion list for volunteers,
volunteer information sheet.

### 22. Parent Workshops in Speech Therapy

ACTON PUBLIC SCHOOLS, Acton 01720
Acting Superintendent: Alan White
Reported by: Kathryn A. Head, Speech
Therapist

Information contact: Mrs. Nadine Yates, 617-893-1081

Administrative contact: Ruth R. Proctor, Director of Guidance, 617-263-2492

The Speech Therapy staff of the Acton Public Schools and the Acton-Boxborough Regional High School feel the cooperation and enthusiasm of interested parents is the most valuable asset a child receiving speech therapy can have. For this reason the therapists sponsor a series of three morning workshops every fall for parents of the students in the program.

Each of the workshops lasts about an hour and a half, and is designed to tell parents about the speech therapy program and to show them how they can help. Three successive weekly sessions

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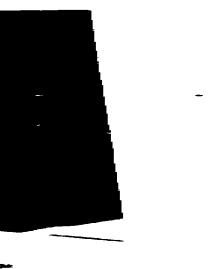


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### 23. School Advisory Council

HOWE-BAKER ADVISORY COUNCIL, c/o Roxbury Multi-Service Center, 317 Blue Hill Ave., Roxbury 02121 Superintendent: William Ohrenberger Reported by: Mrs. Josephine Brown, Council President, 617 -445-5324; Mrs. Nancy Robinson, Agency Representative, 617-445-7092

Information contact: Mrs. J. Brown, Mrs. Nancy Robinson

Administrative contact: James Keane, Principal, Julia W. Howe School & Sara J. Baker School, Roxbury 02121 617-445-6821

The Howe-Baker Advisory Council is the result of an interesting and fruitful combination of community and school groups. Members of the Sav-More Association and the Roxbury Multi-Service Center, two community service organizations operating in the Boston Model Cities area, met with the principal of the Howe and Baker schools in the fall of 1968. Together they decided to form a parent advisory council.

The Council is designed to identify needs and gaps in school services, involve more parents in school procedures, and thus to improve school-community relations.

Since a long established and formally structured Parent Teacher Organization already existed, parents and teachers set up a new group where informality and flexibility were key elements. The council has no constitution or by-laws and functions with an 18-man core of teachers, an administrator, and a representative from the Multi-Service Center, all holding two-year terms. As projects develop, others are encouraged to participate.

The Multi-Service Center provides organizational and professional help; meeting rooms, as well as mailing, xeroxing, and other office services help keep the network together. Parental concern has now brought a social arter paid by the Center to the ERIC ols to assist in securing mental

health service for the students and to supplement the area's school adjustment counselor who is shared by 2,000 children. The center and the Council have worked together to hold workshops for parents and teachers on subjects such as curriculum and drugs and their joint efforts resulted in several Council members appearing on WGBH's SAY BROTHER program.

Parents and teachers are able to really talk, plan, and share information in such a small group, and the schools profit from this in many small ways. Council members are the most active participants on their Title I Enrichment Council, and have occasionally demanded meeting with administrators on certain school problems. Parents and teachers keep the Multi-service Center and the Sav-More Association informed on school issues. According to council members, schools are noticeably more open to visitors than they were before the Coucil was formed. Parents and teachers have worked together on summer workshops, a school library, Thanksgiving food baskets, and other projects.

The achievements of this informal group demonstrate that sometimes combined resources and manpower can do what neither teachers, parents, nor community organizations can do alone.

Date project operational: March 1969 No. of members involved: approx. 20 Approximate yearly cost: incidental (occasional mailings) Source of funds: Multi-Service Center

#### 24. 700 Volunteers

WORCESTER PUBLIC SCHOOLS, 20 Irving St., Worcester 01609 Superintendent: John J. Connor Reported by: Mrs. Robin F. Spaulding, Coordinator Information and administrative contact: Mrs. Robin Spaulding, 617-798-2521

Beginning with a handful of volun-

teers serving three target schools in the fall of 1966, School Volunteers for Worcester now involves more than 700 volunteers (ranging in age from 13 - 75) who gave 100,000 hours of service in 66 public schools (K-12) during 1970.

From the beginning, the program was organized and administered cooperatively by school personnel and interested people from the community with the understanding that, if successful, it would eventually become part of the Worcester Public Schools. During the program's first three years, the Junior League of Worcester provided \$11,000 to pay for office supplies, rent, telephone and secretarial service. In January, 1970 the operating expenses and salary for a full-time coordinator and secretary were included in the school budget.

Essentially SVW began as an attempt to coordinate the efforts of several school principals who were bringing in students from nearby colleges, as well as interested friends and neighbors in an effort to give more individual at-



tention to the disadvantaged children in their schools. It has now become a community-wide program which recruits, trains and places volunteers in the Worcester Public Schools at the request of the schools and school personnel. SVW serves as the central coordinating agency for all individual volunteers and groups in the Worcester Public Schools.

A unique aspect of SVW is its training program for all Worcester Teachers addinistrators in the creative and

effective use of volunteers in the classroom. Also, the program is evaluated each year by every participating principal, teacher and volunteer, and these evaluations serve as the basis for changes.

A handbook defining the purpose, policies, procedures and programs was developed by principals, teachers and volunteers to explain the teamwork approach of SVW. Training programs for volunteers and personal visits by SVW staff are designed to help teachers and volunteers work together and to help volunteers serve as effectively as possible. Recruitment is done through newspapers, radio, TV, posters, brochures, a speakers bureau and one-to-one contact.

A majority of the volunteers serve as teacher aides, child study aides, enrichment and Library aides. They tutor in the classroom, work with retarded or physically handicapped children, and with potential dropouts. Volunteers with a bi-lingual background are in great demand to help children from homes



where English is not spoken. Volunteers also drive for field trips and operate audio-visual equipment, read and discuss classics with small groups of children.

During the summer, the program utilizes teacher aides, recreational aides, enrichment aides and library aides. For the 1970 summer program, 50 student volunteers gave 4500 hours of their time. A newspaper published by SVW includes articles written by the volunteers about their experiences, as well as comments by students who have been on the receiv-

ing end of the effort.

SVW Coordinator Mrs.

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to enrich the curricul

more individual attent

Date project operati 1966

No. of volunteers in Approximate yearly of (\$14,000 for 1 c c secretary; \$4,850 expenses)

Source of funds: sch Dissemination materi SVW Newsletter, he community resource forms



### 25. Volunteers New Librar

BOSTON PUBLIC SCHOOLS
Boston 02108
Superintendent: Willi
Reported by: Polly Ka
Brown, Librarians a



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ure, t Information contacts: Polly Kaufman and Margaret Brown, 617-445-6912

Administrative contact: Thomas McAuliffe, Associate Superintendent, 617-742-7400

The Library Program was established to develop libraries in Boston elementary and junior high schools. Librarians, paid aides, parents and volunteers from School Volunteers for Boston set up a library and then operate it under the direction of the Library Program staff.

The basic purpose of the libraries is to stimulate reading by organizing all the schools' books (except text-books) in one resource center. In addition to circulating books, the libraries offer enrichment and discovery programs of considerable variety: storytelling and reading aloud, science exhibits, films, puppet shows, live animals, math games, hunts to develop library skills, and special visitors including authors of children's books.

The Library Program has two volunteer teams that go from school to school to process borrowed library books. An art committee helps with exhibits and advises on library design and decoration.

More than 200 portable bookcases, built by students at Boston Trade and Dorchester High Schools, serve new libraries until permanent shelving is acquired. The Library Program staff also draws up lists of selected books as guides to preparing the annual city book order in January and the Title II book order in May.

The Library Program began in the fall of 1966, when Boston School hired Librarian Margaret Brown to work with School Volunteers at the Edwards Junior High School. Together they opened the first Library below high school level in the Boston Public Schools. Four years later, libraries were operating in 54 schools (serving 57) all over the city and 16 more are expected to open in 1971. These libraries serve more than 30,000 children and house 100,000 books. Many of these libraries are renovated classrooms.

rger garet The Library Program staff now includes eight full-time professional librarians, 15 aides and approximately 450 volunteers, who come from every Boston community and 14 suburbs. The volunteers are organized into committees, and chairmen from each library meet regularly to share ideas and discuss problems.

Community participation is one of the important aims of the Library Program. Each paid aide comes from his school's community. Parent volunteers constitute the complete staff in over 30 of the libraries and work with suburban School Volunteer members to run more than 20 others. Two federal proposals (EPDA) involving library aides and community volunteers have been funded for this academic year. One provides in-service training and college credit courses in library science for 24 volunteers from East Boston; the other provides the same for ten paid library aides from the Model Cities area. Funding for the latter comes from the Career Opportunities Program through Model Cities.

Date project operational: fall 1966
No. of students involved: 30,000
Approximate yearly cost: \$170,000
(personnel, \$80,000;books, \$90,000)
Source of funds: ESEA Titles I, II,
III and school budgets
Dissemination materials available:
Newsletter

### 26. Volunteer Teacher Aides

PINE GROVE SCHOOL, Rowley 01969
Superintendent: Harold Hershfield
Reported by: Leo P. Bisaillon, UNLOCK
Information and administrative contact:
Allen Brown, Principal, 617-948-2520

At the Pine Grove School fifteen mothers serve as teacher aides on a regular basis doing clerical work, supervising the lunch room, assisting in the classroom and making tape recordings of books. The program is coordinated by the principal, who recruits the aides through notices sent home with the children, newspaper articles and by word of

mouth. Each aide works an average of three hours per week, and the total time worked by the aides each week averages a little over 32 hours. Teachers are free to use the aides as they wish, within broad limits. The principal feels the aides are a tremendous help to his staff.

A unique aspect of the program involves two of the aides who work at home making tape recordings of textbooks (particularly in social studies) for students in the upper grades (the school houses grades 1-8) who are having problems in reading. These students put on earphones and listen to the tape recordings while reading the textbooks. According to Principal Brown, this helps the students coordinate sight and hearing. They gain a more positive attitude, rather than falling farther and farther behind because of difficulty in reading the textbook material. Tapes are also used by the learning disabilities teacher, and cassette units are available for students to take home or use during their free periods at school. The school library also gets a different set of talking books each week on loan from the Perkins School for the Blind in Boston. In a similar manner they help students with reading difficuluties.

Date project operational: April 1967 No. of volunteers involved: 15 Approximate yearly cost: none extra



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#### D. Student Involvement

#### 27. Project PRIDE

NEWBURYPORT PUBLIC SCHOOLS, 333 High St., Newburyport 01950 Superintendent: Francis T. Bresnahan Reported by: Francis T. Bresnahan Information and administrative contact: Richard E. Doyle, Director, 617-462-2533

The development of guidelines for responsible student involvement in the educational program is the purpose of Newburyport's Project PRIDE (Program for Responsible Involvement in Decisions about Education). It came into being the summer of 1970, following a year when student unrest and a breakdown in student-faculty communications were manifested in several incidents, including a student strike.

Four faculty members (selected by the Superintendent from those interested in the project) and ten students (selected by the four teachers) met together five hours a day, five days a week for six weeks to work out proposals for: effective student government; responsible involvement in decisions; better communications in the school; relevant school assemblies and other means for learning about controversial national issues; student rights and responsibilities.

Based on guidelines drawn up by the Superintendent, teachers were asked to recommend candidates and students were invited to apply. Each of the candidates was given a lengthy interview by the four-member faculty screening team. A great deal of effort was devoted to enlisting students who represented a true cross section of the student body activists, and not "yes-men". Those chosen ranged all the way from the left-ist-leaning student who had led the student strike to a student who was dubbed, "straight 'rah rah' buts wants change."

With funds from the State Department of Education's Project APACE (Citizenship-in-Action Program) teachers were each paid \$150 per week and every student received \$60 per week. During the summer meetings, students, and teachers drew up (1) a group of very specific recommendations for making the student government more relevant to the needs of the students; (2) a statement of student rights and responsibilities and (3) a list of recommendations for student involvement (including such areas as curriculum, service groups, tutoring programs, health education orientation, and solutions to overcrowding in the school).

In September , 1970 the Project PRIDE staff received school committee approval for ten recommendations. These included a change in the hours of the school day, an "open study" program for seniors, a schedule of assemblies, mini-courses, a teacher-student effectiveness study and a student-faculty forum. As Project PRIDE continues with the aid of a small budget, student interest and involvment are increasing and more recommendations will be forthcoming.

As Superintendent Francis T. Bresnahan sees it, "The originators of Project PRIDE have no illusions about instant success. There are teachers who are skeptical about the value of student involvement in the decision-making process. There are students who see the project as just another extracurricular activity. The process of establishing communications that are founded on mutual respect and understanding for the different roles of student, teacher and administrator is bound to be a difficult one .... Students have a natural idealism, a natural enthusiasm, and a natural pride in their school. If the school does not foster these things, idealism turns to cynicism, enthusiasm becomes apathy, and pride degenerates into disaffection."

#### 28. Student Tutors for Math

POLLARD JUNIOR HIGH SCHOOL, 200 Harris
Ave., Needham 02192
Superintendent: William M. Powers
Reported by: Paul F. Butler, Department Chairman
Information and administrative contact:
Paul F. Butler, 617-444-4100

Several years ago the Mathematics and Guidance departments at Pollard Jr. High worked together to set up a student tutoring service for mathematics. Students from high level classes volunteered to teach, while those in lower level classes were encouraged to sign up for help. The Guidance Department coordinated the program.

Tuters indicated the areas in which they felt competent to help pther students, and recorded their available times for tutoring. Guidance staff arranged all appointments. Students tutored in the library, guidance offices, and any spare room. Although most students operated in pairs, occasional groups of three and four worked together. The staff found that a study period following lunch every day was the most popular time for tutoring.

In all, thirty students, primarily from the eighth and ninth grades, vollunteered to be tutors, and over sixty students received help. Many teachers noticed considerable improvement in student achievement and attitude towards mathematics, and the program has continued to function.

Date project operational: January 1967

No. of students involved: 90 (first year)
Approximate yearly cost: None extra

# 29. Student-Sponsored Legislation

HYDE PARK HIGH SCHOOL, Metropolitan Ave., Hyde Park

Superintendent: William H. Ohrenberger Reported by: Marie A'Hearn, Director Information contact: Marie A'Hearn, 617-361-1706

Administrative contact: John Best, Head-master, 617-361-1706

In 1961 Hyde Park High School set up one elective "Principles of Democracy" class for interested seniors; ten years later, in 1971, six "PD" classes are participating in state and local legislative proceedings. The course is designed to familiarize each student with political vocabulary and organization, and its success depends on a class structure allowing flexibility and field experience.



Every year "PD" classes work to push through an original piece of state legislation. Each class picks two students as representatives for a Legislative Committee. After all classes have helped to decide upon an issue, this 12-man team contacts local Representatives and Senators for aid in drawing up the bill, and for support in introducing it on the floor. The committee follows the bill's progress through the legislature, occasionally speaking for the



bill, collecting information, and reporting back to classmates.

In the spring of 1970, Hyde Park students strove to raise the age limit of Metropolitan District Authority beach guards from 16 to 18 years. With local congressional support, they were able to push it through the state legislature, and Governor Francis Sargent accepted their invitation to sign the bill into law at a high school assembly.

Several years ago students determined to improve the condition of a local skating rink, and followed their legislative requests from state to local authorities, where they were ultimately successful.

Daily activities may vary widely. During one section's class, three lively discussions developed. Some students had recently refused to salute the flag at a school assembly, and the group explored reasons for their actions and definitions of patriotism. One girl reported on her visit to a City Council's general session. She watched one legislator making a speech to a small and inattentive audience. Students concluded after comparing experiences that much important decision-making goes on outside the general sessions. National and state voting age limits were also debated.

Date project operational: Fall 1961 No. of students involved: 185 Approximate yearly cost: None extra

#### 30. F.T.A. Volunteers

ELIZABETH S. BROWN ELEMENTARY SCHOOL, Gardner Neck Rd., Swansea 02777 Superintendent: Donald McCaffrey Reported by: Elgin T. Boyce., Jr., Principal, Program supervisor Information and administrative contact: Elgin T. Boyce, Jr., 617-673-4271

A casual cafeteria conversation eventually led to an effective Future Teachers of America volunteer program at Brown Elementary School. In January,

1970, eleven staff members from grades 2-6 at Brown School volunteered to work with 16 senior members of the F.T.A. organization at Joseph Case High School.

Implementing the program was relatively easy for several reasons: High School Principal Miss Reagan, F.T.A. Advisor Mrs. Pelletier and the Superintendent and School Committee all encouraged and cooperated with Principal Elgin Boyce and his staff at Brown; all staff members involved recognized the previously limited opportunities for F.T.A. members to gain classroom experience; the double session schedule at the high school and the proximity of the two buildings involved simplified the mechanics of the program; and finally, the relatively young and flexible faculty at Brown School were willing to try out the program.

General goals of the volunteer program, developed by teachers and students, aimed at allowing seniors to work for an extended period of time with one teacher, and at developing a stronger identification with the teaching process than was previously possible with a two-day exposure program. Although volunteers and teachers were free to develop F.T.A. participation in almost any way they chose, two learning situations were considered especially important. Through lowered student-teacher ratios, more remedial and individualized help would be possible; secondly, F.T.A. members could use their special skills and interests to enrich class activities.

Orientation included a meeting with Mr. Boyce and individual student-teacher discussions on goals, values of good and bad experiences, the need for discretion and professional standards, etc. All students and faculty who wished to participate were included in the program. Typically, an F.T.A. volunteer taught one and a half hours once a week from January through April. Some students visited more than one grade and worked twice a week, or lengthened their scheduled working hours and days. By special arrangement, students who wished to come directly over to the elementary school could eat lunch in the school cafeteria.

For informal evaluation, Mr. Boyce frequently visited classrooms, and encouraged volunteers to drop by the office and talk over experiences. Late in May, he sent out an open questionnaire to all those involved. Faculty reactions showed that F.T.A. volunteers had actually planned lessons and conducted special projects, as well as remedial exercises, testing, etc. Most staff members noticed improved student poise and confidence over the months. Of course a few students never quite "came out of their shells", and the faculty recommended more orientation time for future students.

Students enjoyed getting to know specific pupils and teachers and seeing the results of their teaching efforts. One student summed up the feeling of most participants: " As for the teachers, I have nothing but praise. They were brave enough to subject their class to an inexperienced teacher and patient enough to sit back and watch the results. They gave us insight into their profession and helped us learn by trial and error. We learn by our mistakes, and I know I made many. But I feel as though my outlook on teaching as my profession has been enriched and I have gained assurance that I am going in the right direction."

No. of students involved: 16 F.T.A. members, 11 elementary classes
Approximate yearly cost: None extra

#### 31. Youth Tutoring Youth

MODEL CITIES ADMINISTRATION, 2414 Washington St., Roxbury 02121

Reported by: Marilyn A. Carrington, Coordinator, 617-442-8624

Administrative contact: Barbara Jackson, Administrative Assistant, 617-442-8624

Model Cities is a federally funded program designed to make a concentrated impact on urban social problems. Funds and resources are given to target neighborhoods in many of the nation's urban centers and are administered locally by Model Cities Agencies to bring together in a comprehensive manner the physical rehabilitation (housing, business, public facilities) and the social rehabilitation (job training, health, education, income maintenance, mental health, community development) of those neighborhoods.

One federally funded program which has been successfully implemented is the Youth Tutoring Youth Project which was introduced into the Boston Model Cities neighborhood last summer. Originally funded by the Manpower Administration of the U.S. Department of Labor, the program was created to employ underachieving teenagers as tutors for elementary school children. Similar programs have been conducted in New York City, Newark, Philadelphia, Washington, D.C., and Detroit through the Neighborhood Youth Corps.

The goals of the program are to provide better language skills for tutor and tutee, to create a more positive self-image and to deter potential dropouts by fostering awareness of the importance of education. The program also emphasizes responsibility by having the teen-aged tutors plan, organize and evaluate their own program.

The Boston Youth Tutoring Youth program encouraged interaction and cooperation among black, Puerto Ricans and whites. A Summer Title I English as a Second Language project lent four teachers for tutor supervisors, and many of the Spanish speaking Title I participants were recruited as youth tutors. Tutors were also recruited from job application lists at ABCD(Action for Boston Community Development) and the Model Cities Administration. Of the 95 teen-aged tutors selected, 62 were black and 33 were Spanish speaking.

Tutors attended a one-week orientation which included field trips to local resources such as libraries, community agencies, and public services. There were also workshops in creative writing, math and vocabulary games, films, and

25

role playing sessions designed to break the ice and provide experience in handling attitudinal problems. The teenagers were expected to write regular reports on their tutees and make finalweek evaluations. For their services they received \$35 per week.

Tutors were free to select their own tutees. In many instances they selected youngsters from their own neighborhoods. Tutoring was generally handled on a one-to-one basis although in some cases there were two tutors tutors for one tutee. Under the tutors, who were more like hig sisters and brother than authority figures, the younger children made great strides in expressing their ideas and feelings freely.

Sixteen adult supervisors were also involved in the summer program. They organized guidelines, operated the orientation week, and provided resource assistance to the tutors. Supervisors were cautioned not to dictate, but only to assist. Both Boston Public School and Title I teachers and teacher aides served as supervisors. The two groups complemented each other, since the teachers could provide the professional expertise while the aides had the contact and close ties with the community.

One especially rewarding outcome of the program was the cooperation and warmth that came after a rocky beginning where the black and Puerto Rican groups merged. Youth Tutoring Youth was the only program of its kind designed to provide this kind of interaction and is an unusual example of coordination among federally funded programs. Because of its success, the program will function again next summer, and is continuing on a limited basis during the school year.

Date project operational: July 1970
No. of students involved: 190
Approximate yearly cost: \$24,200(personnel \$14,200, materials \$10,000)
Source of funds: Model cities, ESEA
Title I (for some in-service training,) Economic Opportunity funds
(through ABCD)

#### 32. Teen Agers Serving Kids

BROOKLINE HIGH SCHOOL, 115 Greenough St., Brookline 02146 Superintendent: Robert Sperber Reported by: Joel Gopen, Coordinator Information contact: Joel Gopen, 617-734-1111

Administrative contact: Carmen Rinaldi, Principal, 617-734-1111

One example of the increasing number of programs moving outside school walls toward broader learning situations is TASK(Teen Agers Serving Kids) at Brookline High School. The program was set up and is operated by students.

Patterned after Headstart, TASK operates after school in two moderately low income housing developments in Brookline, and involves volunteer high school students and about 60 small children.

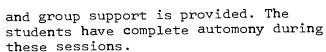
The program began last year when three sophomores requested a place to offer after-school help to young community children. Their idea was to staff the program entirely with high school students and run it themselves. They approached school social worker Joel Gopen to help them make initial community contacts. After meetings with many town agencies, school personnel, and community people, the program was started last January at the Egmont Street Housing Project.

Now in its second year, TASK has grown considerably and meets twice weekly after school for an hour and a half. About 60 student leaders and their young charges are split into groups (pre-school, nursery and kindergarten, kindergarten and first grade). One volunteer professional serves as coordinator and trainer for each group.

A variety of imaginative games, crafts, and projects planned by student leaders fill the afternoon. Activities last for an hour, and then the children go home and students meet for a half-hour "rap" session. Helpful ideas are exchanged







This year students set up a big-sister, big-brother type program for children in the groups who are experiencing special behavioral problems. Eight high school students work individually with eight of these children under the supervision of a community social worker.

Twenty TASK volunteers also serve at a new day care center in Brookline and arrangements are being worked out for a group of football players to work with a group of fourth and fifth grade boys from one of the housing projects. A group of majorettes is also hoping to work with a fourth grade girls' group in Boston.

Although the program is controlled and directed by high school students, adults are involved in significant ways which are both non-threatening and helpful. Two trained social workers help coordinate TASK, emphasizing group work and serving as liaison to the housing project staff and parents. Several interested high school teachers are also helping out on a volunteer basis.

Date project operational: January 1970

No. of students involved: 60
Approximate yearly cost: None extra



#### 33. Seminar Day

FRAMINGHAM NORTH HIGH SCHOOL, Framingham 01701

Superintendent: Albert Benson
Reported by: Henry Fortier, Co-director
Information contact: Henry Fortier and
Frank James, Co-directors, 617-8754774

Administrative contact: John Hart, Vice Principal, 617-872-5101

Seminar Day was a project initiated by the Student-Faculty Forum of Framingham North High School. The day was designed primarily by students, and the faculty assisted when asked for help. Joint committees contacted members of the community, staff, and student body in order to run a program which would clearly reflect the broad range of the "knowledge explosion". Speakers volunteered to give a seminar in one of four time blocks which were divided into 60-minute units. More than 20 options were offered to students during each block, appealing to varying interests.

The cafeteria was used for an all-day rock concert which continued during the lunch period. Seminar Day has also included a continuous snack bar. Many students found this to be a good place to go if no seminar appealed to them during a particular time block.

Students were free to attend any sem-

inar they wished. Though no attendance was required, absenteeism was minimal. During the June, 1970 Seminar Day:

-The Superintendent of Schools held a question and answer period as did the School Committee.

-A former inmate gave several seminars on life in prison and difficulties encountered after release.

-Members of S.D.S., the Socialist Party and Women's Liberation each gave seminars.

-An advertising executive showed how a television commercial was made.

-A teacher gave a talk on Freud.

-An MIT professor spoke on campus rebellions.

-A demonstration of jiu-jitsu was given.

Field trips (students previously had to sign up for these) to various places such as Benson's Wild Animal Farm, the Science Museum, Carling's Brewery were included. There were also a number of all-day events ranging from horseback riding to Yoga demonstrations. The most common reaction of students was, "Let's have one week of Seminar Days!"

No. of students involved: 1600 Approximate yearly cost: none extra

#### 34. Video Motivation

CAMBRIDGE PUBLIC SCHOOLS, 1700 Cambridge St., Cambridge 02138

Superintendent: Francis Frisoli

Reported by: Henry J. Morris, UNLOCK;

Bert Giroux, Public Relations
Information and administrative contact:
Mrs. Elizabeth Boyce, 617-876-4500

Cambridge high school and elementary students helped develop a National Education Television curriculum that was put together by WGBH-TV. Channel 2 staff got assistance from students at the Harrington, Russell, and Agassiz schools in their production of a film series aimed at making students more aware of their surroundings, both nataland man-made.

A series of six thirty-minute movies was shown to elementary Social Studies students for their reactions. The first film, "On Winthrop Street", shows where four Brooklyn boys go when they can do what they want. After the movie students compared the boys' experience with their own. They were asked to think about where they live - what was there and what wasn't.

After showing the six films to classes in Cambridge and three other cities, and hearing the reactions and criticisms of children, the producers of the series discarded one of the films and five were slated for commercial television. They were broadcast on WGBH-TV in the fall of 1970 and again in January, 1971

Date project operational: March 1970 No. of students involved: 150 Approximate yearly cost: None extra

#### Demonstration Against Drug Abuse

NORWOOD JUNIOR HIGH SCHOOL, Washington St., Norwood 02062
Superintendent: Phillip O. Coakley
Reported by: John Twombly, Vice-Principal Information contact: Louis Jennings,
617-762-1170
Administrative contact: John Corcoran,
617-762-1170

Norwood Junior High's drug program produced an interesting side project last year; approximately 150 seventh, eighth and ninth graders marched against drug abuse, while fellow students pulled window shades to show support. Students carried home-made signs in front of the school building. Examples include:

Include:

LET'S NATURAL HIGH
STOP IS THE CUTS
DRUGS BEST HIGH

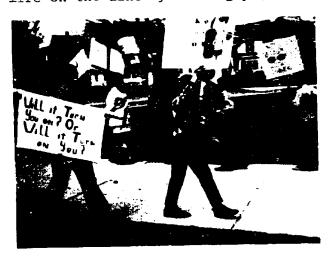
ORWOOD
CUTS
GRASS!

One girl on a horse carried a poster reading "Kick the Horse out of Norwood". Posters were kept and displayed in the building. Radio, T.V. and news reporters

turned out for the moon-time event, in istudents put their own narrate; film together afterwards. Parents and local police showed their support by attending.

Students came to Mr. Jennings, former science teacher and now health instructor, with the original idea for the demonstration. Student support has never been lacking. This is due to several factors. Norwood's health program, functioning since 1967, is well-entrenched in the curriculum. As a part-time coach, Mr. Jennings can establish informal relationships with the boys, and he encourages female teachers to refer any girls to him who want to talk out problems.

Perhaps the administration's nonincriminating attitude is most important: "Drugs are symptomatic of something deeper. A young person who puts his life on the line by knowingly getting



himself involved with drugs has got to have some reason other than mere curiosity."

Mr. Jennings is preparing a special booklet for his program, and plans to send junior high students to elementary schools to speak about drugs.

Date project operational: April 1970 No. of students involved: 150 Approximate yearly cost: None extra

### 36. Learning By Teaching

LINCOLN SCHOOL, 194 hoylston St.,
Brookline 02146
Superintendent: Pobert Sperber
Reported by: Mrs. Charlotte Laven, Director
Information contact: Mrs. Charlotte Laven, 617-734-1111 x478
Administrative contact: Ann MacDonald,
Town Hall, 333 Washington St., Brookline 617-734-1111 x317

For the past several years an afterschool tutoring project at the Lincoln
School has been operating under the
direction and supervision of Mrs. Charlotte Laven, reading specialist. About
45 sixth, seventh and eighth grade students tutor second and third grade pupils
once a week on a one-to-one basis. To
test the effectiveness of the program a
pilot study was designed and conducted
from February 1 to May 1, 1970. The
objective was to decermine if tutoring
would result in improved reading achievement on the part of both tutor and tutee.

Control and experimental groups, composed of ten each, were established for both seventh and third grades. The seventh graders were selected from volunteers, many of whom had had previous remedial help. Every third grade hild in the program was diagnosed and evaluated by the reading specialist and a specific program of instruction was outlined. Before tutoring began there were several "in-service" sessions devoted to remediation techniques, motivation and review of phonics.

The tutors met twice a week with their tutees. They kept a journal of each session and had individual conferences with the reading specialist once each week. Two field trips promoted good rapport between tutors and tutees. The tutors, tutees and control groups were tested before and after the program. As part of a cooperative effort in Brookline, results were analyzed at Boston College Computer Center. On standardized tests administered at the end of the program, the tutors showed a range in scores from no change to a gain of four years, two months. The average gain was one



40 29

year and four months as compared to an expected gain of seven months. Due to their small size, it was not possible to establish a significant difference between the gains of the experimental and control goups. However, in the experimental group, those with the lower I.Q.'s made the greatest gains, while in the control group the reverse was the case. Therefore, it was concluded that if I.Q. was not a factor in the reading achievement gain of the experimental group, another variable must be present to account for change. The other variable in this case is the program.

The tutees gained an average of over five months compared to a normal expected gain of three months. The results for this group were less conclusive, but they did show that increased recognition of word opposites contributed most to the gain score. Both tutors and tutees were enthusiastic ard when asked in informal interviews about the program, they seemed eager to continue and expand the program next year.

This study, backed with concrete evaluation data, demonstrated that tutoring is an effective means of helping tutor and tutee. Mrs. Laven feels that guidelines, organization and supervision contribute to its success.

Date project operational: February 1970
No. of students involved: 40
Approximate yearly cost: None extra Dissemination materials available:
Limited copies of Project report, including evaluation data

#### 37. Mini Peace Corps

MARY CURLEY JUNIOR HIGH SCHOOL, 493 Center St., Jamaica Plain 02130 Superintendent: William Ohrenberger Reported by: Peter Ingeneri, Principal Information and administrative contact: Peter Ingeneri, 617-524-3323

Principal Peter Ingeneri believes that kids are never happier than when they're doing something for other reople, and the Mini Peace Corps at Trley Junior High School thrives on this philosophy. The Corps officially includes all Curley students and teachers who complete volunteer projects for the school, community or country. By identifying each project with a school-wide organization, the Mini Peace Corps helps develop an awareness of the role each student may play in the school and community. Mr. Ingeneri awards a Mini Peace Corps membership certificate to all participants.

Individual projects are sponsored by classroom teachers and have included a wide variety of activities. Most students and teachers at the school have relatives or friends involved with the Vietnam war. These personal interests have led to sending books and home-made birthday and seasonal cards to a local veteran's hospital, collecting money for GI Gift Pacs, and helping the Junior Red Cross collect Christmas toys for youngsters in Vietnam. A ninth grade class is writing letters to GI's in Southeast Asia.

Other projects include making book bags for needy children and refurbishing a homeroom classroom. The school is particularly proud of a cooperative effort with Boy Scouts and other community organizations to clean up the Jamaica Pond. In April, 1970, the Mini Peace Corps provided lunchroom facilities for 700 people, and about 150 students for a Saturday cleanup. The entire group cleaned out truckloads of garbage and assorted rubbish.

Mr. Ingeneri also sees the Peace Corps as a way to acquaint students with the news media. Students are personnally interested in reading news articles describing their projects, or watching fellow students on WBZ-TV's New England Today Show. Students look for articles about similar volunteer projects, so they may offer honorary certificates to outsiders.

Date project operational: Fall 1969
No. of students involved: over 100
Approximate yearly cost: None extra
Dissemination materials available:
Copies of news articles, Mini Corps
certificates

## II. Guidance and Special Needs Programs

## E. Special Education

# 38. Regionalized Special Education

FLAGG SCHOOL, Linden St., Holliston 01746
Reported by: Joseph Hannigan, UNLOCK
Information and administrative contact:
Elmer R. Haskell, Director, 617-4295450

One of the many projects to regionalize special education was effected by the cooperation of the Ashland, Holliston, Millis and Medway schools. By pooling their resources these schools have greatly amplified the facilities available to their special students, and at less cost than before.

Primary, elementary, intermediate, junior high, and high school are the divisions of the program, and each town hosts at least one division. Students ing to another town are bussed to

school. There are teaching and training programs for the mentally retarded and emotionally disturbed; the high school offers occupational training.

The staff consists of a full-time director, who is administrator and coordinator, seven specialized teachers, a speech therapist, and a psychologist. One of the administrative problems has been the requirement for local funding. All records must be kept in quadruplicate, and a staff member may be working in one town and receiveing a check from another. Hopefully new legislation will allow regional funding. Plans to expand next year include adding a primary class for emotionally disturbed children in September 1971. The town of Hopkinton joined the regional project January 1, 1971, and a sixth town may possibly join in September, 1971.

Date project operational: Summer 1970 No. of students involved: 98 Source of funds: Local funding only

4231

## 39. Vocational Training for Educable Students

LAWRENCE SCHOOL CENTER, 15 Lawrence St., Framingham 01701
Superintendent: Daniel J. Donoghue,
Superintendent-Director
Reported by: Roger Brown, Coordinator
Information and administrative contact:
Roger W. Brown, 617-872-2013

This program, designed for the moderately retarded, age 16 and over, consists of four specific job training units. It offers realistic work experiences in the motel-hotel, nursing home, food service, building maintenance and groundskeeping work areas. Guidance services, functional academics and personal social adjustment training are integrated into the program. Emphasis is placed on actual vocational instruction within units established for each job training area.

The students receive an orientation to the actual working environment through use of community based industries. Community placement is the goal for all students accepted into the program after an initial evaluation period of from 8 to 24 weeks, and a maximum training period of 18 additional months. The program has been developed to supplement the special education programs and training facilities currently being used within the greater Framingham region. The majority of referrals come from cooperating school programs with trainable and low educable students who could more appropriately benefit from a vocational training program.

The first thirty students were admitted on November 30, 1970. The overall capacity of fifty is expected to be reached in the spring of 1971.

Date project operational: November 30, 1970
No. of students involved: 30
Approximate yearly cost: \$153,633
(including \$7,000 for remodeling)
Source of funds: ESES Title III

## 40. Integrated Special Education

MEMORIAL JUNIOR HIGH SCHCOL, 615 Roll stone St., Fitchburg 01420
Superintendent: James Finch
Reported by: Donald J. Tangney, Director of Special Education
Information contact: Robert Foley,
Teacher, 617-342-8962
Administrative contact: Donald J. Tangney, West Fitchburg Elementary School,
Fitchburg 01420 617-342-9547

What began as a pilot experimental program to improve the Special Education Program in Fitchburg has now resulted in the full implementation of a program at the elementary and junior high level. The experiment took only one year and negligible cost to the town to prove that Special Education classes can be successfully integrated into the regular school program with benefit to both groups of students.

Prior to the instigation of the pilot program, Fitchburg's Special Classes were conducted in an isolated "Special School." Then, in September of 1969, teacher Donald Tangney and seventeen of his junior-high-school-age special class students transferred to the Memorial Junior High School. There a program was set up to provide maximum small group and individual learning in basic subjects, and maximum integration of the students into such areas as industrial arts, home economics, physical education and music.

The objective of the pilot program was to demonstrate that special class students have much to gain through association with their peers and will benefit from the broader range of curriculum experiences available to them at the Junior High School. It was also expected that the integration would help curb truancy and the tendency to drop out at 16 by providing work skills and job training.

The success of the first year's pro-



gram resulted in its change in status from an experiment to a permanent part of the junior high curriculum. Student programs have been more individualized so that some may now enroll in social studies, art and typing classes where they are able. In addition, some regular school students with academic problems can receive tutoring from trained special class teachers.

Two phases of pre-occupational training have been introduced: in-plant, non-paid training and an on-the job paid program. The in-plant training is currently available in various phases of cafeteria work and assistance to the receptionist. The paid training is of a work-study nature with the students attending several daily classes and then reporting to a part-time job in the community.

The program has been a success in

terms of achieving its original objectives. There has been a lowered drop-out rate among those students who reached sixteen. Students have actively participated in the intra-mural sports program at Memorial and in various extra-curricular activities. Several students won awards during Ecology Week.

In response to the experimental program, various interested and supportive staff members in the Fitchburg Schools have proceded to integrate their elementary classes in the same manner with excellent results to date, Mr. Tangney reports. Plans are now being made to expand the program to the senior high school in September 1971.

Date project operational: October 1, 1969 No. of students involved: 20 Approximate yearly cost: None extra 

## F. Other Children with Special Needs

#### 41. ESL Program

LAWRENCE PUBLIC SCHOOLS, 183 Haverhill,
Lawrence 01841
Superintendent: Fritz Lindquist
Reported by: Wendy Wilkens, Department of Education
Information and administrative contacts:

Information and administrative contacts
Mrs. Suzanne Georges, Title I Director; Claire Kennedy, Assistant
Director, 617-686-7701

When Lawrence opened its schools in the fall of 1969, approximately 500 students enrolled in ESL classrooms; by the time school closed, 786 students needed such attention, and by the next fall 1100 students had registered to learn English as a Second Language. This fast influx of Lebanese, Italian, French, Portugese, and primarily Spanish-speaking children, half of them under ten years of age, created a complex situation which required varying at flexible solutions.

Using Title I and local funds, ESL classrooms were established in 10 target schools. Some were self-contained, and one group is housed on the top floor of a school building; others are pull-out programs, grouping ESL students together only part of the day. The staff uses various curricula including "Distar", "Bankstreet", "Let's Learn English", and H-200 materials. Title T Director Susanne Georges also initiated a bilingual program for the fall of 1970, but found that community parents preferred the ESL orientation towards assimiliating their children into "regular" English-speaking classrooms.

Lawrence's ESL staff includes 21 professionals, two of whom had had previous experience with ESL classrooms, 21 aides speaking four foreign languages, and approximately 70 volunteers. As a condition of employment the Title I



office provides in-service training for all staff members who are not familiar with an ESL classroom situation. The aides were all trained in a 5-week summer program sponsored by the State Department of Education; volunteers met with Mrs. Georges from 2:30 - 4:00 once a week for five or six weeks to receive some audio-lingual and phonics training, and for cultural "sensitizing" and philosophic background.

Mrs. Georges feels that volunteers are vital to the program's success, for they increase individualized learning, encourage community participation and provide specialized expertise. Volunteers were enlisted both by the Title I office and by local organizations. Most are high school and college students from 10 local schools, including two private academies and a Catholic high school, as well as schools in nearby Danvers, N.Reading and Salem, New Hampshire. Title I's office in New Bedford also helped set up Lawrence's program. Volunteers help students on a one-to-one basis at home as well as at school.

In addition to these students and five or six adult volunteers, the Greater Lawrence Department of Mental Health provides a specialist for diagnosing problems two hours a week for one target school. Similarly, A Boston University Master's student in Guidance Counseling offers his services one day a week. Other services have included a free lunch program during the summer sessions, which has been continued in three schools for the fall and winter program.

Combining the efforts and resources of federal Title I funds, local monies

and staff and community volunteer aid of all sorts, Lawrence has been able to initiate a fairly successful and realistic educational program for its minority student group.

Date project operational: Fall 1969
No. of students involved: 1100
Approximate yearly cost: \$336,000
(city budget: Assistant Director,
8 teachers substitutes; federal:
1 Director, 21 aides, 13 teachers,
most materials)
Source of funds: ESEA Title I, local
funds

#### 42. Bilingual Classrooms

LINCOLN ELEMENTARY SCHOOL, Framingham 01701

Superintendent: Albert Benson
Reported by: Wendy Wilkens, Department of Education

Information contact: Mrs. Ignacia
Mallon, Coordinator for non-English
speaking program, 617-872-7892
Administrative contact: George P. King,
Associate Superintendent, 49 Lexington
St., Framingham 01701, 617-872-3248

Framingham became concerned about its non-English speaking population's educational predicament some five years ago. The number of Puerto Rican students in the schools was increasing rapidly; how well were these students learning English and integrating into the mainstream of their elementary schools? At that time the first bilingual tutors were hired and students were taken out of regular classrooms for 30 - 60 minutes per day for individual attention and language training.

This tutoring method did not seem to stimulate educational or cultural interest, and with the increase of grade retention, truancy and school dropouts, Framingham's administration looked for a different solution. In the summer of 1969 a coordinator for the non-English speaking program was hired.

The bilingual coordinator was given time and encouragement to investigate



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This pile to cland was taught by a team of two teacters, one Spanion speaking to one logilate speaking, who were in the Constant of all times. Reading, workerstick and social studies were taught in Spanioh. The children received intense English instruction for around of per sent of their time. For other non-lingual subjects such as art and physical education, children foined the inglish speaking classes.

the state was amazed and relighted to the broad after six weeks the small experimental data depart to about justive results. In departure and solve 1 attends after may a projugal to a presentation and tropped and sater a presentation and biscussion the Branchighan of Gold Committee world to assume financial responsibility for divingual tea bets, lances, audiooxidationists alter as literaty.

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to continue their basic training in English, but, assuming that reinforcement of the mother tongue will expand the learning capacity of the student, the staff provides Spanish audio-oral instruction about community living and elementary science.

Bilingual education has spread to the junior and senior high school levels. Tramingham offers a general culture course, taught in Spanish, covering concepts in the history and literature of the Spanish-speaking world, as well as some information about U.S. history and government. A general math course is taught in Spanish, and ESL classes are offered at all grade levels. Finally, a bilingual school adjustment counselor works to improve individual school and community relationships.

With the support of the School Committee, Framingham's bilingual program will continue to expand its efforts for equal educational opportunity.

Date project operational: fall 1969
No. of students involved: 115-130
Approximate yearly cost: \$80,000
(8 teachers for ESL, 4 bilingual
assistants, 4 for Spanish subjects,
1 community and 1 bilingual aide)
Source of funds: school budget

### 43. Program for Perceptually Handicapped

MARBLEHEAD PUBLIC SCHOOLS, Pleasant St., Marblehead 01948 Auga mintendent: Auga W. Coleman Septembed by: Jamet Heller, teacher Information contact: Fred C. Burnaby, Sell Intermediate Dahooi, £17-631-1512 Abministrative contact: Carlton Chamberlait, Assistant Superintendent, 617-631-0900

live neveral other programs now operating in Massachusetts school systems, Marilehead's multidisciplinary approach, to preventing and amelionating learning disabilities is founded on screening, diagnosis and instruction. The Perceptual Development Team includes a reading specialist, an occupational therapist, a language specialist, and a kinesiologist.

All kindergarten children are screened during the fall completing standardized tests to detect possible perceptual handicaps. Students are selected for in-depth diagnosis by team members, caseloads are established, and individual or small group instruction begins.

Children remain in their regular classes, and are taken out by team members from one to four times each week. Instruction can terminate at any time, at the discretion of the team members and their supervisor. Parents meet frequently with the Perceptual Development Team, and are often encouraged to have their children diagnosed and evaluated by outside agencies. These agencies in turn make recommendations to the team.

Student progress is continually evaluated and statistics are recorded. Tollow-up studies will continuate of grout the child's elementary education.

At the present time, this program is operating in all seven of Marblehead's elementary schools. Dealing with learning disabilities at an early age will hopefully eliminate the elings of frustration that result when a child meets with constant failure because of perceptual handicaps; special instruction may enhance a child's self-image, and this in one of Marblehead's main objectives.

Date project operational: September 1968

No. of students involved: 70
Approximate yearly cost: \$37,000 (personnel,\$32,000; materials, \$5,000)
Source of funds: 50% school budget,
50% state aid

# 44. Mini-Gym Motor Development

J.L. McCARTHY and M.L. TOWNE SCHOOLS, Acting Superintendent: Alan White Reported by: Beverly Lydiard, UNLOCK Information contact: Mrs. Doli Mason, Teacher, 617-263-2042 Administrative contact: Principals Mrs. Alice Hayes, 617-263-4982, and James Palavras, 617-263-2042

A physical education teacher at one of Acton's primary schools noticed that many of the students having difficulties with basic motor skills in her gym classes were also having trouble learning to read and write. She wondered whether motor training might help these students, not only in physical education, but in their academic work.

Through a series of unusual circumstances Mrs. Doli Mann was given an opportunity to try some of her ideas, working on a one-to one basis and in small groups with these children, many of whom had been diagnosed as children with learning disabilities.

Other than her salary, there was no budget for the program and no place for her to work, since the school was already crowded. However, with the help of the school janitor some boxes were moved around and what had been a storeroom became her "mini-gym". A spare blackboard was found and mounted on the wall to be used by the children for exercises in gross motor skill development. An unused rubber footbath was filled with sand and became a useful tool in encouraging the children to practice forming letters.

With the help of the mini-gym, the improvised equipment and the students, Mrs. Mason began developing moror training sequences which were given to all primary teachers in the form of demonstration lessons and mimeographed material, with he request that 10-15 minutes the devoted to this each day.

Several months later all primary classroom and physical education teachers were



asked to identify children with motor difficulties based on class observation. A total of 197 children were identified within a wide range of disability, and classroom sequences were contined with the hope that material would be used more specifically for individual remediation.

The individualized program in the minigym continued. Parents of all children were invited to come to school, observe classes and discuss the program. Material was given to them for home follow-up.

After the program had been underway six months, a meeting to discuss the program and solicit suggestions was held at each school with the principal, classroom teachers (grades 1-3) and the physical education specialist. All of them had been asked to submit a written evaluation. These were generally quite favorable.

A number of teachers and guidance counselors felt the program was definitely helping the children and everyone wanted to see it continue. The school committee had also been kept up-to-date on the program and approved a recommendation that it become a regular part of the curriculum at each of the elementary schools.

In its second year last fall, the program incorporated changes resulting from suggestions by those involved. Mrs. Mason provided the teachers with new material every three weeks for their classroom motor training sequences.

Nine boys and girls from the high school began working with some of the children three times a week, mostly on a cne-to-one basis for perious of 20-25 minutes. So as not to disturb the classes, they work in the corridors. Each aide receives a folder in which the weekly program is set up. The aides have become so enthusiastic about the program that now they are coming up with their own ideas for exercises and improvised equipment.

The mini-gym is still being used as a

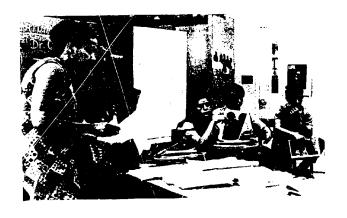
laboratory to develop materials for the classroom, as Mrs. Mason works there on an individual basis with nine children. Mrs. Mason's dedication to the program also includes a desire to put herself out of business—by helping the teachers incorporate motor training so completely into the classroom and physical education programs that her help will no longer be needed.

Date project operational: October 1969

No. of students involved: 1200
Approximate yearly cost: salary for
1 teacher

Source of funds: school budget Dissemination materials available: Classroom activity outlines

#### 45. S.E.E.K.



WILLISTON ACADEMY, Easthampton 01027 (Independent)

Reported by: Roger A. Barnett, Director, S.E.E.K.

Information contact: Mrs. Rebecca Seybolt, 413-527-2761

Administrative contact: Phillip Stevens, Headmaster, 413-527-1520

For two years Williston Academy has run a "Summer Experiment in Equality through Knowledge" (S.E.E.K.) in an effort to help lessen racial tensions existing in America today.

The independent school hunted up various local funds to run the program,



staffed by full-time and part-time volunteers, and teachers from Williston Academy, Spring reld and the Boston Public Schools.

For six weeks each summer 30 black students (chosen by Northern Educational Service, an all black local agency), are bussed from Springfield, and 30 white children come individually from the town of Easthampton. (There are no blacks living in Easthampton.) English, math, black history, art, reading, and music courses are offered to children entering seventh grade in the fall. The children enjoy athletics daily and take occasional cultural and educational trips into the community. The school day runs from 9:00 to 3:00.

While course content is important, attitudes and informal learning are central to S.E.E.K.. The staff has tried to give personal attention to each child, as well as personal evaluations of the program. Reports on each child, written by teachers and the director, go to the home schools at the end of the summer; and at the end of the following academic year the director interviews the children and their current teachers about how the summer experience has affected their behavior and attitudes.

The needs of the S.E.E.K. children created a tutorial program which runs during Williston's school year and is staffed by some of its juniors and seniors. The tutorial program is geared to Easthampton students, grades 4-8, with preference given to children who participated in the S.E.E.K. program. It was found impractical to try to bus students down to Springfield to tutor. Plans are now under way to incorporate the tutoring program into an urban sociology seminar that would take place in the city.

Date project operational: summer 1969
No. of students involved: 60
Approximate yearly cost: \$12,000 (4
 staff salaries)
Source of funds: small foundations
Dissemination materials available:
 case history ("Willistonian", June
 4, 1970)

# 46. Elementary Students Help Pre-Schoolers

SOUTH SCHOOL, Lynnfield 01940
Superintendent: Bernard A. Huntley
Reported by: Richard W. Cogan, Director
Information contact: Richard W. Cogan,
617-592-2957

Administrative contest: Gilbert Bulley, Lynnfield Public Schools, Main St., Lynnfield 01940, 617-344-4305

Lynnfield's Title I summer program met the needs of two groups of children. The first group included all pre-schoolers who were "educationally deprived" (as shown by standardized tests), and additional youngsters whose parents felt their children could benefit from a kindergarten experience. The second group consisted of primary-age students who had learning disabilities, as determined by principals and guidance staff. By working together, both groups benefitted.

The pre-school program was basically an enriched kindergarten program with a low pupil-teacher ratio for its 30 children. Low ratios and individiualzed learning also characterized the primaryage class. These 40 youngsters were grouped with two teachers, while the school guidance counselor, art teachers, and project director worked with individuals and small groups during the week. Students were allowed to structure part of their time themselves, and were free to help each other and the pre-schoolers with their work. No aides were needed for either group, with all the help from staff and the young "tutors".

The older children put together easels, a sand box and other materials for the younger ones. They also helped with the children's "summer books", in which each student recorded the day's events in pictures and words. Pre-school and primary children were free to play with each other, and they took eight field trips together. According to Title I staff, this organizational structure helped achieve one of the program's major objectives: to enhance the selfimage of children who see themselves as inadequate learners.



At the end of the program, the staff found pre-school children had improved in the basic readiness skills, and many traditional "behavior problems: disappeared when children were allowed to structure their own time under staff guidance. Program director Richard Cogan reports, "Perhaps the program proved that we get out of children what we expect of them."

Date project operational: summer 1970
No. of students involved: 70
Approximate yearly cost: \$12,000(personnel, \$10,000; materials, \$2,000)
Source of funds: ESEA Title I
Dissemination materials available:
Title I brochure

#### 47. Project Mainspring

WARRENDALE SCHOOL, Waltham 02154 Superintendent: James Fitzgerald Reported by: Joseph Hannigan, UNLOCK Information and administrative contact: Leo Hill, Principal, 617-893-8050

For the past five years Waltham has conducted a summer program for 240 culturally and economically deprived youngsters in grades 2-6. Each summer a basic theme is stressed, and all activities revolve around that theme. One summer motif was "Man's Pasic Needs-Food Shelter and Clothing". Another focused on minority groups.

The students have some academic work such as reading, but the greater part of the program is more informal, using arts and crafts, music and physical education, with specialists provided in each area. Discussion periods are designed to help students understand and appreciate how their lives relate to the project's basic theme.

During the "Minority Groups" program, students read about various minority groups, saw related paintings, listened to their music and learned their dances. For "Man's Basic Needs", students learned to weave cloth, prepare food and ld various shelters.

Recently the project has been expanded to include a preparatory kindergarten for non-English speaking four and five-year-olds, an occupational workshop for fifth and sixth grade boys, and a section in which English is taught as a second language.

Date project operational: summer 1965 No. of students involved: 350 Approximate yearly cost: \$83,000(personnel \$80,000;materials \$3,000) Source of funds: ESEA Title I

#### 48. A Second Chance

GLOUCESTER PUBLIC SCHOOLS, Blackburn Circle, Gloucester 01930 Superintendent: Calvin E. Eells Reported by: John T. Robarts, Director Information and administrative contact: John T. Robarts, 617-283-0294

Project Second Chance was developed to meet the educational and emotional needs of a select groups of seventh graders who would be minth or tenth graders if they had not been retained in the elementary grades. These are students with average intellectual ability who were unmotivated and falling further behind academically, as measured by standard achievement tests. Out of 65 entering seventh graders referred by their elementary principals, 15 boys were selected to participate in the project; another 15 boys were chosen as a control group. All of the 15 experimental students and their parents eagerly agreed to participate in the project.

Basically Project Second Chance moved these 15 students directly to the ninth grade, where the belonged in age. The Project students take World Geography, Science, Mechanical Drawing or Art, Physical Education and Industrial Arts with the other freshmen. They have 12 periods a week with their core teacher John Halmen for reading, math, language arts, and extra help. This instruction is in small groups of two to eight students, with an average of four. Students are also paid for five hours of occupational experience weekly through the Neighbor-

hood Youth Corps, and are encouraged to participate in all freshman extra-curricular activities. Regular courseling services are available, plus scheduled group counseling from one of the freshman counselors and the Director of Pupil Personnel Services. Monthly group meetings with parents are also scheduled.

Both the experimental and the control group were given the following tests before the program began: Stanford Achievement tests, Otis-Lennon I.Q., and the Minnesota Counseling Inventory. Both groups will be tested again at the conclusion of the program for evaluation purposes.

In addition, both groups and their parents will be asked to fill out a locally developed questionnaire on their year's educational experience in June. Attendance figures will also be compared. Finally, long-range scholastic and vocational comparisons will be made.

Early indications show that the experimental group has greater motivation this year than in any previous academic year. Almost all of the students now indicate they plan to graduate from high school, a goal that previously seemed unattainable.

Director John Robarts writes, "If our experimental group should do appreciably better, 'Second Chance' will stand as a powerful argument for the proponents of continuous progress. The early success of the program has already spurred the development of a pre-vocational track at the junior high school. The project is obviously not a complete answer because it waits until failure is imminent and then makes drastic change. However, it may point out dramatically the need for continuous progress and flexible instruction at all levels."

Date project operational: September 1970
No. of students involved: 15

Amproximate yearly cost: \$10,000(personnel \$8,000; materials \$2,000)
Source of funds: school budget

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#### 49. Project Realization

Needham 02192

NEWMAN JUNIOR HIGH SCHOOL, 1155 Central Ave., Needham 02192
Superintendent: William M. Powers
Reported by: Carol Kellogg, Department of Education
Information contact: Wendell S. Moore,
Director, 617-444-4100
Administrative contact: Calvin Cleveland, Assistant Superintendent, Needham Public Schools, 1330 Highland Ave.,

For the past five years, Project
Realization has been attempting to
strengthen the self-image of ninth,
tenth, and eleventh grade underachievers.
With six teachers, a guidance counselor,
a part-time psychologist, a part-time
coordin ton, 42 students last summer
worked to develop healthier attitudes
about cremselves which in turn were expected to bring higher academic achievement.

Teachers and students participated in athletics—horseback riding, rock climbing, bicycle trips, etc.—which were designed to build positive relationships among students and with adults. Small groups discussed human relations problems on a regular basis.

Parents were also involved and students were encouraged to work on relationships in the home as well as in school. Psychological and psychiatric consultants advised teachers on the dynamics of small groups.

An evaluation by an outside group is now being completed. Tentative results indicate that the objectives of the program are being realized.

Date project operational: 1965
No. of students involved: 42
Approximate yearly cost: \$14,900(personnel \$11,000;naterials \$39000)
Source of funds: ESEA Title I

#### G. Guidance

#### 50. Jr. High Handbook

TANTASOUA REGIONAL HIGH SCHOOL (Frimfiell, Prooffiell, Holland, Trumbridge, Wales), Trumbridge Cliff Superintendent: Foland Wilson Reported by: Poper Chamette, THLOOF Information Jonitant: Frank Handfield, Guidance, 413-347-9301
Administrative acutact: Carfiell Morton, 413-347-9301

All of the students who start attending the 1,300-pupil Tantasqua Regional High School in seventh grade come from small elementary schools in small towns. To help make this transition to such a large school less of a shock, the school administration, guidance department, teachers and students have joined forces to produce a handbook which tells entering students about every aspect of the school program, from course offerings and extra curricular activities to the marking system and the health program.

The handbook includes a colorful cover designed by students, and pictures taken by students on almost every page, as well

as a map of the school. I tudents wrote many of the articles in the locklet and also did the layout.

When Tintasqua's midance counselors visit the sixth grade of each of the five elementary schools that feed into Tantasqua, they distribute the handbook and use it to take students on an imaginary trip through a typical day at the school. On a day in June after the seniors have left the school, prospective seventh graders go to the school and run through a mock schedule. The "old" seventh and eigth graders are assigned to new students as guides, and answer questions for them.

The handbook is also distributed to parents when they visit Tantasqua.

Date project operational: September 1970
No. of students involved: 230
Approximate yearly cost: \$175 (for printing costs)
Source of funds: school budget
Dissemination materials available:
Copies of handbook

#### 51. Computer Assisted College Selection

NEWTON SOUTH HIGH SCHOOL, Brandeis Rd.,
Newton Centre 02159
Superintendent: Aaron Fink
Reported by: Margaret Addis, Guidance
Counselor
Information contact: Margaret Addis,
617-969-9810 x332
Administrative contact: John Cullinane, Director of Pupil Personnel
Services and Special Education, 88
Chestnut St., W. Newton 617-9699810 x354

Students at Newton South High School facing decisions about college can turn to a computer for help. This is how it works: First the student indicates his preferences concerning such things as degree major, college size and location, costs, financial aid, student

activities and campus life on a college data checklist supplied by Interactive Learning Systems, Inc. (the organization which provides the college selection service).

Students are encouraged to take this check list home and go over it with their parents. The next step is for the student to list these preferences on a worksheet in order of their improtance to him.

The student then talks with an aide (a work-study student specially trained for the program). The check list and worksheet are carefully gone over, questions are answered, and the student is shown how to operate the keyboard of a computer terminal. Finally, the student sits down at the keyboard, typing letters and numbers into the machine to relay his preferences via a telephone line to an ILS computer.

As he types, replies come from the computer in printed form indicating the number of colleges which meet the specifications he is setting up. As the specifications become more detailed, the number of colleges shrinks. Once it gets down to 25, the student is advised to ask for a print-out of the names and addresses of these institutions. Then the student keeps on going usually until the choice narrows down to just a few colleges. (and names of these are printed out for him.) Average time at the computer is 20 minutes. Some students use it as many as five times during their junior and senior years.

The ILS computer has four data files--one containing information about 2400 colleges and universities, one containing vocational information, one with scholarship information, and one with information on vocational and trade schools. Some students consult all four data files.

Guidance Counselor Margaret Addis is quick to point out that the computer is not a predictor of admissions even though students' college board scores are used as one of the inputs. According to Miss Addis, the counselors like the system because it requires that the student really think about what the important elements in college are for him. and this makes his conversations with the counselor more meaningful. She feels it keeps the counselors from being "inaccurate computers" trying to recall names of colleges for students, and helps make college decisions more realistic for some students, along with encouraging those who should be encouraged -- the average students or those with limited funds.

A typical response from a student is:
"It gave me names of colleges I never heard of before." Probably the program's greatest drawback is its cost to the school, which averages about \$4 per student.

Date project ope . ional: Fall 1969
No. of students involved: 500
Approximate yearly cost: \$4 per
student
Source of funds: School budget



53 🚜

## III. Curriculum Areas

## H. Humanities/Art/English/Media/Music

#### 52. Concord Consortium

CONCORD-CARLISLE REGIONAL HIGH SCHOOL, Concord 01742 Superintendent: Ralph Sloan Reported by: George I.McCune, Coordinator Information contact: George I. McCune, 617-369-9500 Administrative contact: Arleigh Rich-

ardson III, National Humanities Faculty, Colonnade Building 617-369-7800

"What Makes Man Decent?" was the topic which brought together three teachers and one student from each of five schools in Concord for periodic meetings during the 1969-1970 school rear. The group represented a public high school, two Roman Catholic schools and two independent schools. The discussions involved the role of humanities in the secondary school curriculum and marked the first time faculty members from the five schools had ever come

together to discuss their academic programs.

With funds provided by the National Humanities Faculty, the Concord Consortium (as the group called itself) invited five prominent educators in the fields of philosophy, anthropology, religion, sociology and physics to visit the participating schools, talk with students and faculty members and meet with the Consortium. Each school hosted one guest and set up the schedule for his three-day visit.

Following these visits, the Consortium members met to discuss what had gone on, and at the end of the year the group met once more to talk about and digest the events of the preceding months. The headmasters of all the schools cooperated fully by granting faculty and students the necessary leave time.



43

54

In the words of Coordinator George I. McCune, "We wanted to establish direct lines of communication between the schools. We wanted to sort out common problems and talk about what we felt should happen to young people in education to make them more humane. Where were we going in humanities in our schools? How could we share some of the things we were doing? We were not trying to save the world in one year, but we hoped some of the ideas which evolved would be shared with the staff and students of the various schools and that an ongoing dialogue between the schools would be established."

Despite the fact that the two parochial schools are going to close, the Consortium concept is continuing and spreading to several other communities where Consortium members have now taken new teaching positions. The group elected to keep in touch with one another, and two of the schools have hosted seminars during the current school year.

Date project operational: September 1969

No. of members involved: 15 teachers, 5 students

Approximate yearly cost: \$1,000 (exclusive of consulting fees)

Source of funds: 5 school budgets(consulting fees paid by National Humanities Faculty grant)

Dissemination materials available: 24-minute film "Images of Man" made by students available from: Film/TV, Concord Academy, Concord 01742

#### 53. Enrichment Program

CONWAY GRAMMAR SCHOOL, Conway 01341

Superintendent: Warren Bennett

Reported by: Mrs. Nancy Winter, Chairman

Information contact: Mrs. Nancy Winter,

617-369-4445

Administrative contact: Richard Dacey.

Administrative contact: Richard Dacey, Principal, 617-369-4610

Every fourth week the Conway ammar School sets aside the last



hour of each day for an enrichment program. Students select from a list of topics they devise each month, including special subjects such as pottery, leather-crafts, audio-visual experiences gymnastics, skating, and skills games. A topic for the week is selected by each student, and as a result, classes and grades are intermixed.

The objective of the program is to expand the present curriculum to include areas of student interest and make better use of resource people in the community. By involving parents and other townspeople, the program can be operated at a minimal cost. It is also felt that the program will help students learn to make their own decisions and follow through on them; choices will allow students to develop individual interests, and the mixing of age groups will encourage a new kind of cooperation. Community people involved in the enrichment program have a chance to contribute toward the children's education in a meaningful way, and interact with teachers.

The program is just beginning and if it continues to receive support from students, teachers, and parents, it will be expanded. Areas being considered as additional topics include photography, radio, dramatics, woodworking, dance, oceanography, fly-tying, etc. The list could be infinite depending on the interests of the students and the resources of the town.

Date project operational: 1970
No. of students involved: 130
Approximate yearly cost: \$50 (materials for first year)
Source of funds: P.T.A.

#### 54. Art in Interdisciplinary Learning

BRENNAN MIDDLE SCHOOL, County St.,
Attleboro 02703
Superintendent: Robert J. Coelho
Reported by: Edward J. McCarthy, Principal
Information contact: Mrs. Alix Morin,
Art Teacher
Administrative contact: Edward J. McCarthy, 617-222-7750

The problem of relating the visual arts to an interdisciplinary team teaching situation in the Brennan Middle School was always one of finding enough "released" time blocks so the art teacher could plan activities in common with mathematics, science, social studies and language arts staff. In planning for the 1970-71 school year extra effort was made to make the art teacher a full team memoer, and to have her plan every day with other members of the team.

The relationsiip of the visual arts to other disciplines can be seen in one team's fall learning unit. Stressing the idea of organization, the language arts teacher worked with the students on organizing time and studied Robert's Rules of Order. The social studies teacher built upon this by exploring the organization of government and the application of Robert's Rules to a town meeting. Students in science were working with the scientific method and with problem-solving techniques while the mathematics classes were studying set theory and the organization of a textbook. Meanwhile, in art classes the stuents were studying organization through the medium of color and the grouping of color patterns.

The staff feels the visual arts offer many relationships to the traditional "major subject" areas, and Brennan

Middle School's attempts to relate these two have been gratifying.

Date project operational: September 1970
No. of students involved: 80
Approximate yearly cost: None extra Dissemination materials available:
"Scope and Sequence for Sensory Arts In Learning"

# 55. Art Spills Over Into the Classrooms

coln 01773
Superintendent: Randolph Brown
Reported by: Carol Kellog, Department
of Education
Information contact: Diane Koules, Art
Teacher, 617-259-9404
Administrative contact: William Warren,
Principal, 617-259-9404

HARTWELL SCHOOL, Ballfield Rd., Lin-

Hartwell School has loosened the structure of its art program without discarding a schedule altogether. Regular classes are held every other week, and in alternate weeks the art areas are open for children and adults to use as they wish, when they wish. Art Teacher Diane Koules finds that work done in art classes spills over into the classroom, and classroom projects extend into the resource center art areas.

Much cross-over has occured naturally in science, art and math, since the specialists and materials for those subjects have been placed in close proximity to one another in one of Hartwell School's building units. This work shop-resource center holds large quantities of materials which are organized into work areas such as a clay corner, a carpentry corner, a sewing corner, a painting corner and a triwall area. One room holds mostly math materials, and math specialist Elizabeth Bjork holds small group math classes there. The music area under Maureen Kenney and Maxine Yarborough, contains Carl Orff instruments with



which informal improvization occurs frequently, and houses regularly scheduled music and dance classes.

A need for more meaningful parent involvement gave rise to a training session for parents helping in classrooms. It was run by science specialist Bruce Whitmore. Teachers are also encouraged to use the workshop for their own art work or for informal after-school projects.

Principal Bill Warren reports that the most important effect has been to give unmotivated children a place to go to do work of their own choosing.

Date project operational: 1970
No. of students involved: approx. 400
Approximate yearly cost: None extra

#### 56. Murals by Students

CAMBRIDGE HIGH AND LATIN SCHOOL, Broadway & Trowbridge Sts., Cambridge 02138

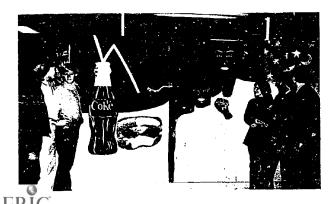
Acting Superintendent: Francis Frisoli

Reported by: Joseph Santoro, Art Director

Information contact: Mrs. Rita Ritterbush, teacher, 617-876-4500 x225 Administrative contact: Raymond Darcy, Principal, 617-876-4500

Large scale, colorful murals on the walls of the foyer and faculty cafeteria of Cambridge High and Latin School may serve as a model for meeting problems of vandalism.

Under the direction of Mrs. Rita



Ritterbush, students selected themes to express messages they wished to convey. Subjects range from mythology to Black Power and the American Indians. The students purchased paint and worked after school to cover drab walls with original and colorful art work.

Not one act of vandalism has been committed where murals cover the walls. Mrs. Ritterbush feels this is because the other students watched the murals being painted and thus gained respect and enthusiasm for the finished products.

Mrs. Ritterbush looks forward to expanding this mode of art work, using walls of new buildings as well as those already built.

Date project operational: October 1970 No . of students involved: 25
Approximately yearly cost: None extra Source of funds: School budget
Dissemination materials available:
"Carrel", December issue

#### 57. After-School Art

JOHN WINTHROP SCHOOL and BENEDICT FENWICK SCHOOL, Dorchester 02125 Superintendent: William H. Ohrenberger Reported by: Carol Kellogg, Department of Education

Information contact: Nancy Cushwa, Innovator & Teacher, 10 Gardner Terr.,
Allston, 617-782-4714

Administrative contact: Louise McCoy, John Winthrop School, 35 Brookford St., Dorchester 2125 617-445-8660

When only certain children were allowed to take part in Title I science, music and art programs, Art Teacher Nancy Cushwa decided to provide enrichment for the remaining children. She spends one hour after school four days each week--two days at Fenwick School and two days at Winthrop School--providing drama, reading, art experiences and whatever other programs and activities emerge naturally from the children's interests.

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## 58. Bible as Background for Literature

NEWTON HIGH SCHOOL, TO be to 1 1000 the artist of desire Asia to Fire reported ings to retrocantile at, 1010 to 1010 amount of an incident artists of the continues War of aw, less between the restrict and the awareness.

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#### 59. DECK Plan

MARBLEHEAD PUBLIC SCHOOLS ...x 305,

Mark Peleedi (1945) Superform was: Aura W. Coleman Peparsed by: Phyllis Smith, Public Felations

Information confact: Mrs. Donothy A. Miles, Highish Lept. Head,617-631-8920 Abditionative contact: Aura W. Coleman, 617-631-8920

One of several new English curricula in Massachusetts which allow students to follow an individualized program has been designed and implemented by the Modified Tenior High School English Lepantment. New courses were offered to seniors the fall of 1971, and the program will include all high school utudents in September 1971.

hase i on the results of a cross country survey of ungraded secondary schools made by Mrs. Corotney a. Miles, English lepartment head, the new ungraded curriculum allows a large degree of choice and self-limection for each student. To achieve this goal, the program proposes:

- To permit every student to work at his own learning rate.
- To allow a student to select courses unith heat serve his indivisual needs or interests.
- To place more responsibility on the student in choosing the direction his English education will take.
- 4. To place more responsibility on the student to assess the amount of sifert he is willing or able to devote to his studies.
- i. To oblift the emphasis from marks to gratification of the intellect, progress and achievement.

English courses are distinctly different in ternal content, and approach there traditional high school courses, and are tenigned to improve and entries the entire English condition for crades lost. Classics, however, have

basic skills have been restructured and new ones added in an effort to more realistically meet the interests, alilities and needs of today's students.

The newly structured material is a been decked according to difficulty of skills and materials. Courses are provided to correct deficiencies in reading, writing and volcabulary building, and a variety of high level courses is also offered. The decks are designed in the following manner.

- D-Deck--For the student who eds strengthening in any parallar area such as vocabulary building, reading comprehension, or written composition. No I-Deck courses are being offered during 1070-71, as the program is being offered to seniors only. The program will include sophomores and juniors next year.
- il-leck--For the student who has not achieved either academic or personal satisfaction in traditional course offerings. E-Peck courses are designed to make progress possible and give the student a higher legree of satisfaction. Examples: Man in Conflict in American life and Literature which combines representative novels and essays along with field trips to the Museum of Fire Arts, Lexington and Concord, historic Marklehead, Salem and Boston; and survey of Mass Media.
- C-Deck--For the student who has shown no serious deficiencies in any special area and whose natural abilities indicate that he will best achieve by being permitted to work at an average college preparatory level. Examples: Contemporary British and American Drama including such authors as synge, Shaw, Coward, Maughm, "Neitl, Anterson, Inge, Williams and Miller; and a shessementer course in Afro-American interature.
- r=legk==log the student whose past achievement in English indicated elther an ability to progress at an a delerated rate or a high degree

of interest in the subject. Examples: Chakespearean Drama; World Literature, including masterpieces of Dostoyev-sky, Yoestier, Camus and Joyce; the Bible as Literature; Studies in Modern American and British Poetry.

s-Deck--For the student who is both willing and able to work at a greatly accelerated rate at the highest level of expected achievement. Course choices include: Modern British Novels, an intensive study of three major authors, and the History of English Literature. In the second semester both courses require a research paper and provide experience in creative and expository writing.

!ate project operational: September 1970

No. of students currently involved: 300(seniors)

Approximate yearly cost: \$10,000 for materials

Source of finds: School budget Discemination materials available: Brochure

# 60. Media Study Broadens Curriculum

CONCORD ACADEMY, longord 01742 (Independent)

Reported by: Mussell Mead, Dean of Curriculum.

Information contact: Bobbi Osler, Media Director, 617-369-6080

Administrative contact: Russell Mead, @17-369-6080

Concord Academy recently restructured its whole curriculum to include non-graded and pass/fail options, accreditation of all its art courses, independent projects on and off the campus, and divisional rather than specific course requirements for graduation. The school's philosophy and structure encourages interdisciplinary learning, and its media studies program is a good example of how these theories and regulations have actually ERIC worked in the classroom.

Within a two-year period, 15 courses are offered to Academy students. Some are open to other private and public school pupils, teachers, and community people as well. Courses are not centered on media alone, for the staff feels that this approach is too narrow. Media Director Bobbi Osler explains, "Greatest stress is first on feeling a sense of accomplishment, second on new concepts or attitudes, then on producing work of professional quality."

Course offerings reflect the approach, for in addition to covering standard media such as photography, newspaper journalism, film, and television, students can also look at song lyrics, technical and interpretive drama, background music, tebating, and all possible combination, as ways of communicating with of ers. Some courses meet once a were for three hours, some regularly three limes a week, some as tutorials. All are centered in a workshop equipped for making and editing films and audio or video tapes, with a school schedule that allows for large blocks of free time. The school houses boarding students, so the workshop is open some evenings and on weekends.

Since the program stresses a sense of accomplishment and new concepts, there is little pressure on students until they begin to get delusions of professionalism, at which point they are encouraged to opt for projects which require public showing and criticism. As an example, the films available for rent were selected out of 8 1/2 hours of films and videotapes; they are not simply a collection of everything that got finished.

Concord Academy students often teach various approaches to the visual media to students at different grade levels in local public and private schools, from elementary to adult education. This work earns full academic aredit in the livision of the Bumanities.

Staff members also produce video documentaries of town events and programs which are shown with a portable projector in the lobby of the town post office and similar heavy traffic areas.

Local film-makers and graduate students have given much time to Academy programs, and the school reciprocates with open screenings, teacher-training sessions, and use of school facilities for the New England Screen Education Association screenings and workshops. The school has been a curriculum development site for the American Film Institute, and students are at present working with the "21-Inch Classroom" series. In the 1969-70 school year students produced a film for the Concord Minuteman Association and were commissioned to do a 24-minute documentary for the National Humanities Faculty.

Bobbi Osler reports, "One of the results of the introduction of various media studies into the regular academic curriculum was not that we persuaded teachers in regular departments to use films and videotapes, but that the differences in the relationships in media courses between student and teachers and student and 'subject' encouraged others to develop or extend their own liberalizing of course structures; so that it is the methodology which has influenced not the magic boxes or 'relevant' vocabulary."

Date project operational: 1969-70 No. of students involved: 042 (whole school)

Approximate yearly cost: None extra Tissemination materials available: Lescription of curriculum

#### 61. Music Week

MILLER ELEMENTARY SCHOOL, Holliston  $^{(1)}$ 74.6

Appendituation: Tavino J. Placentino Repurse Ligar Indieth Miller, Librarian Information and administrative contact: Indieth Miller, + 17-419-1600

The tradition of a pilet library har given way in Miller decool to some lively, total direction of Mropolects under the direction of Mropolects Willer, the school librarian.

So to the most imaginative projects

ERIC: "Music Week" lant March.

Music Week was a pilot program designed to use the Library's total resources to enhance a particular area in the curriculum. Mrs. Miller and her co-workers produced a week-long exhibit to excite and interest the different musical tastes and talents of the children. They looked, touched, listened, played and sang and even put on band hats and uniforms. They experimented with rhythm instruments, band instruments, tone bottles, tone bells and an autoharp. Tapes and records (from Bach to Peter, Paul and Mary) provided both a rudimentary learning lab and a continuing general background for the musical goings-on.

The Library also organized a "Science Week" to interest the students in weights and measures, and to illustrate and study last year's solar eclipse. A "Cookie Day" allowed children to play with letter and number-shaped cockies, encouraging their recognition and facility with the symbols. One imaginative highlight of the plan was "Cookie Bingo".

To sharpen the children's awareness of their surroundings, Mrs. Miller arranged a "Jet-port Week", when they focused their attention on what Holliston would be like as a jet-port: how the geography and architecture would be different, and what noise pollution would be like. Mrs. Miller also plans to stage a "Colonial Week" in the spring, when students will study the colonial history of their area.

Date project operational: April 1970 No. of students involved: 400(at present)

Approximate yearly cost: None extra

#### 62. Operatic Happening

WEEKS JUNIOR HIGH SCHOOL, 7 Hereward Rd., Newton Centre 02158
Superintendent: Aaron Fink
Reported by: Carol Kellogg, Pepartment of Education
Information contact: Raymond Smith,

Information contact: Raymond Smith, 617-969-9810 x348

Administrative contact: John Harper, Pirector of Music, 88 Therthut St., West Newton 00165,617-96 )-9810 8296

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It is not uncommon for a ninth grader at Weeks Junior High School to know the leading parts from three major operas. In the annual production of a standard opera, professionals sing all the main parts except one, the one being reserved for the 700 voices of the grades seven through nine students taking part.

This program began about twelve years ago as a result of an association with Boris Goldovsky. Since then operas such as Aida, Faust, Il Trovatore, La Traviata, Don Giovanni, Amahl and the Night Visitors, and Marriage of Figaro have been produced after approximately two months of intensive work in the music classes.

The project usually extends into other areas. The year Aida was performed, for instance, the social studies department focused its work on Egypt. For some productions scenery has been painted; for others, large scale projections of

smaller pictures have been focused on a backdrop.

By projecting is actual musical score onto a screen, music teachers can help large groups of students study highly sophisticated musical notation. The opera project also gives junior high students an opportunity to work with older students when the senior high orchestra joins the best of the junior high orchestra to accompany vocal parts.

The final production is given in a 1400-seat auditorium with the 700 seats nearest the stage being reserved for the student singers, and the rest for the audience. Originator of the project, Raymond Smith, feels the audience is incidental to the whole production because the experience for the students is such a rich one.

Date project operational: 1958
No. of students involved: 700
Approximate yearly cost: \$500 (personnel \$100, materials \$400)
Source of funds: School budget

## I. Health/Physical Education

# 63. Comprehensive Drug Education

ROCKLAND PUBLIC SCHOOLS, 34 Goddard
Ave., Rockland 02370
Superintendent: John W. Rogers
Reported by: John W. Rogers
Information contacts: Mrs. Geraldine
Brickley, Memorial Park School, 617878-1367; Lawrence Frazier, Junior
High School, 617-878-4341; John
Burgess, Senior High School, 617878-1541
Administrative contacts: John W. Rogers,

The Rockland Public School offers a total health program including drug education for grades K-12. Due to the extreme social problems relative to

Louis B. Dovner, 617-878-1540

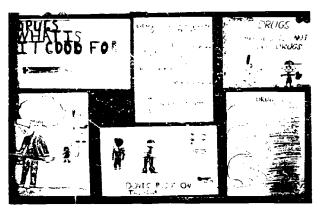
drug abuse, special emphasis has been placed on this area.

At the elementary level a full-time teacher conducts health education classes once a week, September through January, for the intermediate grades, and once a week, February through June, for the primary grades. All classes have shown a great deal of interest in this program and their response has been tremendous.

Three films from the Rockland Health Council Library were shown: "Narcotics -- Background Information", "Narcotics and Health", and "The Control of Narcotics". All classes viewed a drug I.D. kit from the same library and heard an explanation of its contents. Several newspaper and magazine articles written by drug users advising others

2 51

not to experiment with drugs were read as part of this unit, and many pupils brought in pamphlets, booklets and clippings pertaining to drugs. At present the art teacher is cooperating with all sixth graders to make posters for school bulletin boards; the fourth and fifth grades are making them for classrooms.



At the junior high level a full-time teacher offers health education to the severth grade twice a week for the entire school year. Next year, the staff plans to work with grade seven from September to January, and grade eight from February to June.

At the senior high level, health education has been incorporated into the physical education curriculum and two interns have been employed to work in the physical education department. Again, special emphasis is placed on drug education. Superintendent John Rogers reports that this kind of collaboration has not worked as well as the staff hoped, and as of September 1971 a full-time health instructor will take over the program.

The units on drug education at the junior and senior high levels are similar in nature. A pre-test on drugs is administered to all classes involved, with a follow-up of drug fact sheets and sound filmstrips. The entire student body views the film entitled "Irugs and the Nervous System", and two drug addicts undergoing rehabilitation at Marathon House conduct discussions with students in each class. They are available for further dissision after school. The program

culminates with the following activities: post-test and evaluative question-naires, bulletin board displays and professional displays.

An important aspect of the Rockland drug education program which the administration feels is extremely valuable is the psychological counseling service provided to known or suspected drug abusers in accordance with the system's published policy for drug abuse. Twice a month a psychologist from the Judge Stc e Clinic meets with staff members concerning particular case histories.

In addition, a drug course is given every Tuesday evening, 7:30-9:30, at Rockland High School for the adults in the community. This class is also open to junior and senior high school students.

Date project operational: September 1969

No. cf students involved: 4,074
Approximate yearly cost: \$25,200(personnel \$24,000, materials \$1200)
Source of funds: Local
Dissemination materials available:
Brochure

#### 64. Birth of a Drug Program

AMHERST-PELHAM REGIONAL HIGH SCHOOL,

Amherst 01002

Superintendent: Ron Fitzgerald Reported by: Paul Andrews, Department of Education

Information contacts: Leo Vigneault,
 Guidance Counselor, 413-549-3710;
 Paul Lengieza, Drug Committee Chairman, 413-549-3710

Administrative contact: Paul Lengieza

In 1969 Amherst Regional High began a development program for a systemwide drug education curriculum. High school staff members have volunteered their time to work with elementary and junior high guidance personnel, students, parents, and other teachers from both local and neighboring districts.

Guidance counselor Leo Vigneault hosted a country-wide workshop for

approximately 100 students and 80 teachers. In six sessions held during the three-day conference, children and adults split into small groups to hammer out present failings and possible future program objectives concerning six different aspects of drug abuse as outlined by the state, including education, rehabilitation, the law, etc. With left-over funds, administrators participated in a similar workshop. In addition, about 70 students offered to attend a faculty curriculum day to view drug films with staff members; this turned out to be a valuable lesson for the faculty, according to Mr. Vigneault, because they were able to hear student reactions to films, and found out that their own opinions of effectiveness were often very different from student viewpoints. Parents were also asked to view films, which included the Department of Education's "21 Inch Classroom" materials.

Using part of the school budget's 1% discretionary funds, Drug Committee Chairman Paul Lengieza and his staff are planning curriculum segments for social studies, biology, human relations and home economics. An elective minicourse on drugs is in the works, as is a resource center for drug information, to be housed in the Guidance Office. The committee is researching adult education programs as well, and plans to visit other ongoing programs for ideas. Of particular interest is the nationally known project in Stanford, Connecticut.

In the fall of 1970 a four-week unit on Drug Awareness was introduced into the Junior High School Biological and Physical Sciences Curriculum. This was a new elective unit offered to two classes only (70 students) for the purpose of involving students in the development of the unit. The unit will hopefully become a regular part of the curriculum for all seventh and eighth graders.

Date project operational: Fall 1969 No. of students involved: 800 high school, 950 junior high school Approximate yearly cost: under \$2000

(seminar fees, curriculum samples, films) Source of funds: School budget

#### 65. K-12 Health Education

WORCESTER PUBLIC SCHOOLS, 21 Irving St., Worcester 01.609 Superintendent: John Connor Reported by: John O'Neill, Director Information and administrative contact: John O'Neill, 617-798-2521 x76,79

The Worcester Public Schools Drug and Health Education program has gone through several distinct stages.

Phase I - 1967-68: The Department of Health, Physical Education and Safety inaugurated a five-day drug education program for secondary school students housed in four senior high schools. Volunteer teachers were given a one-day workshop, taught by drug experts in the Worcester area, such as Dr. Aaron Feldstein at the Worcester Foundation for Experimental Biology and Dr. John Scott of the Worcester Youth Guidance Center.

The teachers, volunteers from all disciplines, went back to their respective schools and taught five periods of drug education for five consecutive days, teaching all students. The program centered around discussion, films and guest speakers from the Worcestar Medical Society. However, student and teacher evaluation indicated that this approach was not very successful.

In 1**9**67 the department pu**bl**ished a grade 7-12 Drug Curriculum Guide and was chosen as one of 19 communities throughout the country to participate in the National Institute of Mental Health drug workshop in San Francisco.

Phase II - 1.968-69: In the summer of 1968, Worcester developed a K-3 Health Education Guide for its 53 elementary schools. The staff believes that drug education must be treated in a total health education approach; the kindergarten students should start by consider-

ing the dangers of the medicine cabinet. Classroom teachers are carrying on this program.

In 1968, Harrington Way Junior High School opened in Worcester, and a health education program was taught by two certified educators. Since 1968 all of Worcester's senior high schools have had a required health education program for all students. This is also taught by certified health educators.

Phase III - 1969-70: During 1969-1970, teachers and administrators wrote a curriculum guide for grades 4-6. At one high school, students organized a Youth Action Against Drug Abuse Club which has spread to other secondary schools and is now part of the total program.

Worcester's ultimate aim is to have a K-6 health education program in all elementary schools taught by the class-room teacher(this program is now in effect in grades K-3); a required health education program in all junior high schools (to date, this program is in one junior high school); and, a required health education program in the senior high schools (this goal has been accomplished).

From February of 1970 through May of 1970, Worcester's department of Health, Physical Education and Safety conducted a three-credit in-service drug education program for 65 secondary school teachers. Starting in February 1971, a similar 15-week course is offered to elementary teachers for three credits.

Since 1969, the department has also sponsored Adult Drug Education programs every semester under the Department of Adult Education.

For the last three years Worcester's program has been part of a total comminity project, under the leadership of Community Services of Greater Worcester.

Date project operational: September 1969

No. of students involved: 30,000

Approximate learly cost: \$110,000(personnel \$100,000, materials \$10,000)

Source of funds: School budget

Dissemination materials available:

Brochure

#### 66. Socio-Biology

BRAINTREE PUBLIC SCHOOLS, Braintree Superintendent: William F. Young Reported by: Paul Andrews, Department of Education Information and administrative contact: Henry Lague, Director, Braintree High School, 617-843-3530

The Braintree public school system has developed a K-12 Socio-Biology program built upon personal motivation and prevention, rather than on fear. Integrating many areas ranging from drugs, alcohol and sex to obesity and nutritional habits, the program has won national and regional National Education Association awards, and has served as a model for programs in other Massachusetts communities and hundreds of school systems across the nation.

Director Henry Lague began developing Braintree's program in 1965. Unlike many crash programs, this one was developed after three years' research. Mr. Lague consulted local educational, civic and religious leaders as well as many students to identify local problems and to develop courses that would speak realistically to particular age groups, serve local needs and promote understanding between children, parents and the community.

Each grade level curriculum differs in subject and approach, but several general principles apply to all ages: Students of both sexes are usually grouped together in order to foster better understanding of each other; small group discussions are used to promote peer-group learning and reinforcement; guidance, health and physical education staff work with Mr. Lague and his assistant Joseph Grant to coordi-

nate Socio-Biology with other programs and curricula already in existence; finally, teachers are gradually incorporated into the department on a full-time basis, and are chosen "for their student support, knowledge and understanding of the problems, and ability to communicate without bias the more delicate areas of this study."

Approximately 250 teachers, nurses, guidance personnel and administrators have taken Mr. Lague's course on sex and drug education sponsored by the Norfolk County Teachers Association, to become more familiar with Braintree's program, and to set up similar programs in their own schools.

For grades K-6, Socio-Biology is integrated into the daily program, and its impact depends heavily on the class-room teacher. Working closely with guidance personnel and Mr. Lague's staff to organize and develop curriculum, the elementary teachers talk about sex in simple forms, beginning with flowers and working up to mammals; they also discuss digestion and nutrition to encourage students to develop proper attitudes towards food and health.

The high school "Mod Squad" students explore group dynamics with Mr. Lague in a "psychology" class. Using five one-hour sessions to get acquainted with small groups of fifth and sixth graders, these high school students encourage "rap sessions" about smoking. By talking with fellow classmates the elementary students hopefully will be motivated to stay away from tobacco when they move up to junior high.

The seventh grade girls talk with the school nurse about menstruation while Mr. Lague talks to a few boys at a time about such pre-adolescent worries as hernias, gang showers, etc. He often takes the boys right to the junior high locker room, and introduces them to a few sympatheric junior high teachers to ease tension.

Information on drug abuse, alcohol and sex education is given primarily inior high students. Seventh graders

usually study sex and adolescence with four special lectures and follow-discussions in a two-week period. Had group consists of approximately each students, and is led by the Socio-Biology staff. Using a similar schedule, two specialists and the Director talk about alcohol, drugs and "going steady" with eighth graders. Role playing and taped interviews of drug users, who are still in school and are easy to identify with, enhance the drug discussion.

By the time students reach high school, they should be fairly well versed in all health subjects. Venereal disease is specifically covered in several sessions with freshman classes. Juniors attend a psychology class run by Mr. Lague and a specialist for two periods a week in one term. In group talks, students use a more sophisticated psychological approach in dealing with human sexual relationships and family living problems. (Does femininity mean being "flighty, dumb and overemotional" as often pictured on commercial TV?)

When high school students are using drugs and feel they can talk about it, they are encouraged to join a small rap session and compare feelings with four or five other drug users over as long a period as they wish. The staff also refers students to special agencies if they express such a desire.

Stressing individual responsibility in health and sex habits and ethics, Mr. Lague feels that Socio-Biology will prepare students "for a world they will enter, rather that one we would like them to enter."

Date project operational: Spring 1968 No. of students involved: 2500 (25 on Mod Squad)

Approximate yearly cost: Salaries of 2 instructors; materials under \$200 Source of funds: School budget Dissemination materials available:

Descriptive brochure

#### 67. Lifetime Sports

WARE HIGH SCHOOL, Ware 01082
Superintendent: Neal F. Todd
Reported by: Mrs. Isabel K. Bradley,
Physical Education Instructor
Information contact: Mrs. Isabel K.
Bradley, 413-967-6234
Administrative contact: Stanley A. Sydla,
Principal, 413-967-6234

A firm conviction that lifetime sports are of prime value, and an awareness that not enough was being done in physical education classes led to the establishment of the Girls Athletic Association at Ware High School. Since most lifetime sports are co-educational, the program involves boys as well as girls. It is not geared to the superior athlete interested in varsity competition, but rather to every girl and boy.

During the past three years the GAA has tried to find a sport to interest every girl, and to get every girl into a sport. These efforts have been 95 percent successful.

When the program started the FAA had no equipment except tennis rackets and no facilities except an indoor gym and plenty of undeveloped outdoor playing fields. However, the following lifetime sports are now offered to Ware students: skiing, archery, badminton, bowling, table tennis, horseback riding, judo, tennis and camping. The success of the progam has come through the use of community facilities, without any expense to the taxpayer.

Ware, a small industrial town of 7,000 located in the western part of Massachusetts, proved to be rich in opportunities. Owners of commercial sports facilities were eager to work with the school and usually offered reduced rates to school groups. Among the public and private facilities being used are ski areas, a golf course, riding stable, campground, tennis courts, bowling lanes and a school of judo. High school facilities are used for archery, badminton, table tennis, golf skills and tennis

these lifetime sports during physical education classes and in the intramural program.

In addition to making use of other recreational areas, three factors have been essential to the success of the program: student teachers from Springfield College who have contributed the necessary man-power, leadership and supervision; ready cash from the GAA treasury (\$1000 obtained through an annual candy sale); and the complete support and approval of the shoool committee and school administration.

The GAA funds are used primarily to reduce student fees, provide transportation and purchase awards such as the GAA pins, letters, Senior Girl award, bowling trophies, badges for the Judo Club, Ski Club etc. Previously, only the girls on the varsity basketball team could win a "W" -- now, a girl can win a GAA "W" based on participation in sports, leadership, service and physical fitness. School insurance covers all faculty-supervised sports, such as ski lessons, camping weekend, etc.

Each year as students have become more familiar with lifetime sports, the program has grown, and students have shown improved leadership and more advanced skills. Some sports have grown from a small, experimental group to a full-scale operation. For example, skiing began in January, 1968 with 23 girls taking five weekly lessons at a nearby ski area. Some provided their own ski equipment, others rented it. Transportation was provided by the GAA. The following year participation increased to 45 students and the school provided the bus.

In January, 1970, 65 students took ski lessons and two busses were needed. A winter vacation trip to a ski resort is financed by proceeds of a ski festival which is open to the public (style show, display booths by ski shops and areas, winter sports equipment exchange, etc). Weekend ski trips are being added to the program this winter.



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spromémate permis materials IIII (france conel limit se le la la IIII)

la treasume (IIII)

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### J. Vocational Education

# 68. Foods Service Training Program

NETTHERM HIGH SCHOOL, I I HEISTED TO.

THE CONTROL OF MISSION MISSION MEDICAL MEDICAL

The control of at heedman night include the trainful fact training in the insertion of life, inrough at armanger centrality the cateteria staff, girls life perfect in took as a business may have the quartical opportunities for rearring and managing. The food flerwice in the local state and deals with food is the control of a comercial scale

The filgram odvers meal flanning, functioning, management, food preparation and presentation and acquaints students with the National School Lunch Program menu planning, equipment, and care and storage of food. In addition to performance, good appearance and attitude are stressed to the groups of two or three girls who work together.

The course meets two double periods a week and an extra double period or an entire day in the cafeteria can be arranged on a volunteer basis for girls who are interested in this aspect of food service. The program has been operating successfully for three years.

Date project operational: 1968 No. of students involved: 10 Approximate yearly cost: None extra



#### 69. Work-Study Program

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These a final minimum analomic tropromovition as the experience of an elicitic tropromovition as the experience of an elicitic formal destroyments are included in the needs of potential imposition attained who could not meet the requirements for entening variational acts I amit to be who did not benefit from traditional text local learning, due to lack of motivation or lack of ability. All students in the program are at least 16 years old.

Turing the morning students are schedule! into four academic classes. They also receive regular counseling from the program director on an individual bas's. The remainder of the day the students work at jobs they have obtained themselves. Some effort is made by the school to solicit cooperation from local employers, and if a student is laid off, the teacher-coordinator often helps him find another job.

The coordinator visits employers periodically to observe students on the job and to confer with employers about students' progress. Each student must keep regular hours agreed on in advance with the employer.

Date project operational: September 1969

No. of students involved: 23
Approximate yearly cost: \$10,000
(personnel)

(personnel)
Source of funds: School budget
Dissemination materials available:
 Some material on philosophy and
 policies

#### 70. School Typewriters Used at Home

SOUTHWICH HIGH SCHOOL. IN WELL OF THE Appropriate Control of the Control of Meters appropriate Control of the C

I not wear, reteral Verstienal Piusastien funcs purchased two portable typeswriters to a stowler High school to bely makes me homework proglems for typewolting classes.

fouthwire is and ally a "blue-collar" town and many families are unable to provide a typewriter at home for their youngsters. Using typewriters after school is often impossible, since busses transport 90% of the student long, and do not provide late schedules. The typewriting room is used every period in the day. Homework assignments can be difficult, especially for someone who has been absent for more than a few days.

Students sign the portable typewriters out just as if they were library books. The staff has found that students can be trusted with expensive equipment. The typewriters are taken home almost every day. In fact, the school plans to use local funds to purchase several more for 1971.

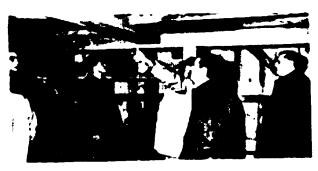
Each typewriter costs approximately \$80, and the educational value received far exceeds this figure. Several girls who left school a few weeks before summer closing were able to complete business courses with the help of the typewriters. Hopefully this will lead to some gainful employment.

Date project operational: 1969
No. of students involved: 200
Approximate cost: \$260 (for 3 portable typewriters)
Source of funds: Voc. Ed. Law 58-210
and local funds, 1971



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#### 71. An Historical Restoration



NASHOBA VALLEY TECHNICAL HIGH SCHOOL,

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Superintendent Sport by The earlies

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insuse! In Hilarim contume, a carpentry erodente from Machola Valley Technical High Tobool opent a week at Flimoth Plantation in June 1970, assembling the hasic structure of a 17th dentury house which students themselves had studied and built according to original plans. This historical rectoration project, a cooperative venture of the Flimoth Plantation (a restored colonial village near Plymouth Rock), state and federal educational agencies and Mashoba Valley Tech, introduces students to colonial construction and the use of antique tools. Hopefully these students will increase the small number of badly-needed restoration crafts-

Bernholdt Nystrom, Administrative Coordinator at Nashoba Valley Tech, first conceived the idea for the project in casual conversations with Washington officials about the lack of restoration expertise, and the possibility of a pilot project in this area. When Mr. Nystrom came to Nashoba Valley Tech in 1967, Superintendent -Director Thomas Lafionatis was excited by the idea, and serious planning began, Washingtor committees were supportive, for this was to be the first Historical Restoration Program associated with vocational training.

In 1968 Plimoth Plantation administrators spent many planning hours with Nash-Dba Valley Tech staff members. Plimoth

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In the tall, students visite! Fillerth Flantation to look at the future site of the building. By appling, Eaton's house foundations were erected on school grounds, and in June students reassembled the foundations on the permanent site. Other groups of students travel to Plimoth Plantation occasionally to continue erecting the building and to install hardware, forgework and furniture, all made at Mashoba Valley Tech.

Staff members intend to preserve the project's history very carefully, so that other groups may initiate similar programs in the future. Students and the two instructors working directly with the project keep a journal of activities, and are producing films and slides of various stages of development, Professional broadcasting organizations, including NBC and a West German station have also recorded the story. Students are proud of their praticipation. One boy boasted, "Won't it be great when one day after I'm married I come by and point out to my children that I build this historic building...man, this is one historic marker I won't pass

Date project operational: Fall 1969 No. of students involved: approximately 20

Source of funds: School budget (for salaries of 2 instructors); Plimoth Plantation (for building materials)



### 72. Diversified Occupations Program

CHARLES H. McCANN VOCATIONAL TECHNICAL HIGH SCHOOL, The Commission of the Commission

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A ministrative contacts Sames West (11,
413-663-1385

Claw learners, unionablevers, patential dropouts and handicappel students within the Morthern Perkahire Perional Cahoci Listrict now have an apportunity to develop good work habits and basis job skills in a diversified occupations program at Charles H. McCann Verational Technical High School. All students enrolled in the program must be at least 14 years old and able to benefit from the instruction offered. They enter the program at their own request, with the consent of their parents.

The program has several unique features. It begins at 12:30 each day when students go to the cafeteria for a hot lunch. At 1:00 students begin attending three 40-minute classes in Erglish, arithmetic and reading. At 3 p.m. after the regular day-students have gone home, students in this program go into the shops, where the boys learn auto mechanics, metal fabrication and plant maintenance, and the girls study typing, business machine operation, key punch and personal grooming. At 5 p.m. students are dismissed for the day.

A special academic curriculum centers around the developmental reading laboratory and the new library. Students use a wide range of programmed material, supplemented by teacher-made tapes and exercises. This allows each student to begin at his own level and progress at his own rate on the basis of his interests and potential. Team teaching allows the instructors to plan jointly with the students and conduct small group tutorial sessions.

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Date project perationals September

No. of athlests involved: 3: Approximate granly wat: 037,000(yerconnel 000,000, equipment and matecials 04,000)

Course of fishis: local and federal

#### 73. Computerized Investing

ACTON-BOXBOROUGH REGIONAL HIGH SCHOOL,

Acton 01720

Acting Superintendent: Alan White Reported by: Gerald Duggan 617-263-7738 Information contact: Gerald Duggan, teacher

Administrative contact: Raymond J. Grev, Principal, 617-263-7738

For this two-month project, Accounting II students are divided into groups, and each is given a hypothetical \$10,000 to invest in stocks list lity the New York, American or Over-the-Counter Exchanges. With the aid of a small computer (which was Conated to the school) students find the number of shares, vost per share, value of shares, total investment, total worth, money gain or loss, percent of gain or loss.

Each group chooses a name from one of the mutual funds and selects a leader who is responsible for the group's investment. Selection of stock is done with the help of teacher advisors, through research or sometimes just on "hunches". Three times a week the students use the computer to make buying



Each group of students is evaluated

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Carp project operate mala contact to a No. of caudenia into its in the Approximate yearly contact to be extra-

## 74. Graphic Communications



HINGHAM HIGH SCHOOL, 41 Pleasant St., Hingham 02043 Superintendent: William Mahoney Reported by: Daniel J.Roberts, Coordinator Information and administrative contact: Curt Poyden, 617-749-2160

In answer to community demands and student interest in more vocationally-oriented courses, Hingham High School has introduced the graphics arts into its curriculum, offering two specific courses as well as related segments in English, Susiness, Art, and Industrial Arts subjects.

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In addition, some aspects of the program reach an estimated 400 students annually through regular Art, Business, English and Industrial Arts classes. Thus, Coordinator Daniel Roberts reports, students are acquainted with an increasingly important area of modern industry.

Date project operational: September 1969

No. of students involved: 425
Approximate yearly cost: \$28,800 (personnel 823,000, materials \$5,800)
Source of finis: Voc. Ed. Act 88-210,
MDEA Title III

### 75. Exploratory Vocational Training

BLUE HILLS REGIONAL VOCATIONAL TECHNICAL SCHOOL, TECHNICAL DESCRIPTION OF THE SCHOOL O

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The Exploratory Training Program was established for academically less able students from the secondary special education programs of the seven-town Plue Hills region. The purpose of the program is to allow each student to achieve proficiency at some vocational skill in which he demonstrates ability, thereby broadening horizons for future occupational success. Both the Blue Hills Regional Vocational Technical School in Carton, and the Henry O. Peabody School in Norwood provide the staff and facilities for this exploratory program.

The program was not established as a substitute for the ongoing special education programs in the public school systems; rather, it is meant to be a valuable supplement to their programs. Students continue to attend their regular junior and senior high schools for academic instruction, and at the end of each academic day, they are transported to Blue Hills and Peabody schools for vocational instruction. The training courses run for two hours, from 3:00 to 5:00 p.m.

The Blue Hills Regional Vocational

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The leafoir Tchool also provides training in fool services and health services. Wight girls and two hoys presently attend the Peabody program. The group of students is trained in many aspects of food preparation, while the other group prepares to work as nurse's aides or hold related jobs.

Participating students are selected from secondary special education classes in the Blue Hills region and other criteria for selection include vocational aptitide, performance on a vocational readiness test, social maturity, academic achievement, and teacher recommendations. After considering this information, the staff interviews each student and his parents before making final decisions for admission.

The students seem to be highly motivated and very interested in the program. Staff members are pleased with the students' performance and progress, and are optimistic about their vocational competence and future occupational success.

Date project operational: October 5, 1970

No. of students involved: 30

Approximate yearly cost: \$22,900

(Curriculum Development and Workshops \$2,500, transportation \$10,800)

Source of funds: P.L. 90-576



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### K. Science/Environment/Math

# 76. Science Center for Suburban and City Children

NEEDHAM PUBLIC SCHOOLS, New Home 1.17.

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line ton, Science Senter, Highland

violation, New Harm + 17-404-4101 x218

the information contact: John Griffin,

lineator of Science, Needham High

Tailool, Nee Harm 617-404-4100 x259

In its five-year history, Needham's Neignest Penter has worked towards several goals, served various student populations, and has operated with several sources of funds, but it has always excited children, parents, and even teachers. Its 1970-71 cooperative program with the King School in Boston is no exception.

The Science Center, housed in one of

galang termelak berentary 1960–196, sept eath latinesses of animal and alogism - live maker, an owl, rail the, also subsequence and many other live min conferr pasies; a purpov skeleton, against model spider, and a three-footlong model camera that works--all these marketials and animals are used by the staff in large demonstrations given at year it and a clamentary schools and, this year, at the Finz School. Hundreds of shildren from grade: 2-6 laugh as Pirector Norman Harris inhales helium and then talks in a high, squeaking voice. They learn to pet snakes and watch 110 volts of electricity burn up aluminum foil. These demonstrations typify the Center's unusual approach to teaching science.

The Center Staff includes two assistants to the Director, a Northeastern co-op student and a part-time secretary. A Title III project for three years, its popularity spurred the Needham School Committee to provide local funds for the program to continue. Besides caring for all their charges and equipment at the Center and preparing and conducting large-scale demonstrations, the staff



74 63

also holid after-school sessions with teachers for preparation and followthrough programs, and for feedback on their own operations.

Perhaps the most exciting aspects of the Science Center program are the small, informal and unstructured projects that take place; and Needham's cooperation with the primarily black King School in Boston has made these projects even more meaningful to city and suburban children alike.

Using Title III funds, the King-Timilty Council now pays for one assistant's salary and some materials so that the King School may benefit from Science Center facilities and activities along with the Needham Schools; in turn, Needham Public Schools set up opportunities for King Students to join Needham children on such projects as early morning bird outings and spider hunts.

As the staff visits individual classes which have volunteered to care for an animal, they encourage some particularly motivated students to work with them at the Center for a few afternoons to become "specialists". This Fall, bantam hens supplied by an interested high school student sat on fertile eggs in classes at the King School. Some eighth graders became engrossed with the hens and will now visit Needham classrooms as hen specialists to describe and answer questions about the birds.

Other teaching interns have helped with large and small demonstrations. Excitement is obviously generated. One boy went home and built his own incubator for egg hatching, and a girl informed Mr. Harris that a frog she had caught on a field trip in 1969 lived almost a full year. Since a hen has been sitting in the King School library, it has become quite a center for bird study.

Real friendships developed between Boston and Needham sixth-graders as they spent four days at Camp Merrowvista in Ossipee, N.H. exploring the countryside. For this trip in early June 1970, teachers chose 18 students from each community for their particular interest in science. While the camp director gererously offered his facilities free to the schools, Needham picked up the tab for busing and food.

In four very busy and exciting days, children collected all kinds of samples, climbed a mountain, built terrariums, played baseball, sang and acted out skits just for fun.

This year's sixth graders are all anxious to go, according to one assistant, after seeing slides of last year's trip. The camp director, who also became very excited about the project, plans to hold a three-day training session for college students before the youngsters arrive this year, so that college trainees will be able to observe and participate with regular staff members and the children.

Mr. Harris, former educational director of Boston's Museum of Science, first envisioned the Science Center in talks with Superintendent William M. Powers. His whole operation rests upon the belief that motivation is the key to learning, and that if the program staff could excite teachers and students in large demonstrations which no single school could afford to prepare, and reinforce this excitement with all kinds of small projects on an informal basis, every thing from scientific knowledge to reading and writing ability could be motivated and children from several racial and cultural backgounds could learn together without even noting their differences.

To present such a free-wheeling program, collaboration has been welcomed and necessary: parents and administrators from Needham and from the King School spent long hours planning together, and high school students have given time and materials to the Center; two METCO students went along on the 1970 camping trip, while Boston Tech students built a model for a science demonstration; a local farm provided turkeys for students to cook and then reconstruct skeletons. Possibilities are endless and administrators would



like to expand activities between Meedham and King School children.

While Title III funds run out for the program in 1971-72, Mr. Harris hopes that the joint program can continue somehow. The faculty and community certainly support the efforts of the Science Center as measured by a questionnaire. One parent's reaction, typical of many, read: "We are thrilled cver the program...Our child rarely tells of school activities - but the science program has been described to the most minute detail. Please continue it!"

Date project operational: Fall 1970
No. of students/personnel involved:
5,000 students, 4 personnel
Approximate yearly cost for NeedhamKing program: \$7,800 (for personnel),
\$2,000 (for materials), \$250 (for
travel)
Source of funds: King-Timilty Advisory Council (ESEA Title III)
Dissemination materials available:
Magazine reprint, "Advance"; report "Science for Self-Motivation";
Science Center tours available for

### 77. Bird and Nature Museum

groups of 10 or more

ATHOL JUNIOR HIGH SCHOOL, Athol 01331
Superintendent: James P. Kelley
Reported by: Harold Desmond, UNLOCK
Information contact: Robert Coyle, 617249-6083

Administrative contact: James P. Kelley, Athol Public Schools, 584 Main St., Athol 617-249-9522

The Athol Bird and Nature Club was born on a geology field trip. Junior High Science Teacher, Robert Coyle and six of his former students formed the club which now has 100 members. Most are students, but the club welcomes all interested adults in the community, and membership age ranges from 12-80!

e club began work on the museum a

few years ago. Originally, collections and displays were housed in the Junior High Science room, but they soon outgrew the space provided, and the museum has expanded into an adjacent empty room. The collections include approximately 200 mounted birds and marmals, display cases containing fossils, rocks, minerals, marble artwork and many student models of parts of the human body, the process of mitosis, rivers, bird silhouetts, etc. Statues, figurines, plaques and plant life samples complete the collections. Student volunteers staff the museum.

Display cases were made from old china cabinets and old counter type display cases. Students volunteered to refinish old cases and cabinets needing repair.



Club members pay a \$2 annual fee and raise other funds through cake sales, dances, and the sale of jewelry mide from minerals collected on trips and polished by the club's stone-polishing machine. Funds pay for a yearly schedule of field trips to "collecting areas" as well as monthly guest speakers for the school and a newsletter. The publication includes sightings of various birds and provides members with a guide to locating specific kinds of bird life.

The club has also made arrangements with the town of Athol to develop a bird and nature sanctuary.

As a natural outgrowth of the club's activities and its desire to preserve and display local birds, animals, plants, and minerals, the museum is a source of pride for the school and community alike.

Date project operational: 1966
No. of members involved: 100
Approximate yearly cost: \$200
Source of funds: Dues, club projects
Dissemination materials available:
Newsletter

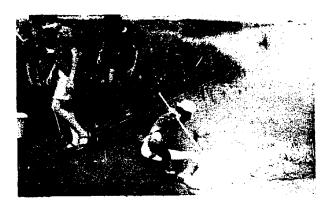
### 78. Marine Science: A Pilot Program

REVERE HIGH SCHOOL, 153 Beach St.,
Revere 02151
Superintendent: C. Frederick Kelley
Reported by: Richard G. Luongo, Head
of Science Department
Information contacts: Co-Directors
Richard G. Luongo, 617-289-2620;
Joseph LaValle, 617-284-0180
Administrative contact: C. Frederick
Kelley, 617-284-0480

Revere's pilot program was conducted during an eight-week summer school session for high school students, and worked toward three immediate goals: collecting, preserving and classifying all organisms indigenous to Revere Beach and surrounding areas; constructing detailed topographical maps of six varied sites in Revere, including beach zones and salt water marshes; and accumulating scientific data about the salinity of the water and the size of sand particles at each of the six sites.

Fourteen students were instructed in the proper use of snorkels, face masks and fins. They were free to use them at any time to observe the organisms in their natural environment and to collect new or different specimens not found in the tidal zone.

In good weather classes were usually held on the beach. One day a week was spent in a science laboratory to classify organisms, draw maps and or-





ganize the data recorded at the sites. Mondays were reserved for trips to distant ocean locations such as Cape Cod, Gloucester and Ipswich. In poor weather students were taken to places like the New England Aquarium and Woods Hole Oceanographic Institute.

The students, most of them lifelong residents of Revere, discovered many interesting facts and questions about the ocean and its contents. They found answers to some questions; others are still scientific mysteries.

At present the program exists as a club activity; it will become a full-fledged part of the science curriculum in September 1971, and eventually may develop into a separate Marine Science Program.

Date project operational: June 1970
No. of students involved: 14 (more anticipated in Fall 1971)
Approximate yearly cost: \$2,180 (personnel \$1,680, materials \$500)
Source of funds: School budget





#### 79. Conservation Corps

QUABBIN REGIONAL HIGH SCHOOL (Barre, Hardwick, Hubbardston, Oakham), South St., Barre 01005

Superintendent: Corridor Trask
Reported by: Joseph P. Freitus, former
Director
Information contact: Richard Nyman,
617-355-4651
Administrative contact: Kent Bailey,
Principal, 617-355-4651

During any school day, as many as 300 high school students might be attending class at one of Quabbin Regional High's eleven outdoor classrooms. The Conservation Corps, made up of about 15 seniors interested in the out-of-doors, has created learning areas just a short walk from the school building. Each "classroom" includes plank benches seating 30 people and a slate blackboard hanging from wooden supports. A special outdoor bell system gives a 10-minute warning of the approaching period end. Director Joe Frietus encourages all staff to use the outdoor classrooms for learning through direct experience. Math students, for example, may tie clotheslines between trees to visualize different angles.

The Corps members use their conservation class time and free periods (two to three hours a day) to plan, scrounge for materials, dig and build. Outdoor classrooms, however, are only one of many Corps projects. While developing a nature trail beyond the classroom area students dug holes for signposts, built bridges, cleared swamps and trails, and put in ponds and animal shelters.

A "blind line" made of a plastic coated steel wire stretched between upright posts, guides blind students along the Corp's nature trail. Turning portable tape recorders to the numbers indicated in Braille along the way, students listen to information concerning a particular spot. The Corps has also put up a weather station of two staging platforms which they found at the local clump.

Other projects include raising \$1,000 (in one year) by collecting five tons of aluminum tonic and beer cans, helping elementary pupils build outdoor classrooms at nearby schools, and reopening an Indian mountain trail.

Conservation Corps projects have increased student motivation and created an environmental awareness affecting all school situations. For example, seniors are free to use one outdoor area during their free periods, and, though unsupervised, they do not disturb others or pollute the area in any way. A few Conservation Corps students, once labeled as potential drop-outs, now want to continue studies in environmental sciences. Concrete examples of increased learning, motivation, and respect for conservation, together with low maintenance costs, have generated a great deal of community good will.

Date project operational: 1967
No. of students involved: 65 Corps
members, 1,000 students
Approximate yearly cost: \$10,000 (for 1 salary)
Source of funds: School budget
Dissemination riterials available:
Slides

# 80. An Outdoor Classroom in Hartsuff Park

ROCKLAND PUBLIC SCHOOLS, Rockland 02370 Superintendent: John W. Rogers Reported by: Thomas J. MacDonald, Project Director Information contact: Thomas J. MacDonald, 617-878-8336 Administrative contact: John W. Rogers, 34 Goddard Ave., Rockland 02370, 617-878-1540

In 1966 a Natural Science Committee formed in Rockland to convert a 15-acre piece of school property into an outdoor classroom. The site was called Hartsuff Park and had been used for many years as a picnic and recreation area. The School Department had purchased it as a possible school location,



but the center of population shifted the priority to other areas of town.

The Natural Science Committee included teachers and members of civic groups who saw the value of constructing an outdoor laboratory in which children could learn by doing. When this Committee looked over the site, it contained many discarded automobiles and hundreds of cans, papers and bottles; an abandoned Girl Scout building remained a shell of its former self.

After many hours of volunteer work and donations, the following has been created: 1.) Natural Science Museum and Zoo 2.) Amphitheater Ama 3.) Wildflower Area 4.) Moss and Fern Area 5.) Herb Area 6.) Tree Farm 7.) Fox Run and Wilderness Trails 8.) Swim Area 9.) Conservation Building 10.) Natural Science Programs. The school children did most of the work themselves.

After school each day during pleasant weather children from one of the five elementary schools in town and pupils from the Jr. High work at the park or ecological problems. In the winter months classes are held indoors at the Jr. High. Three teachers from both academic levels supervise these students and accompany them on Saturday field trips each month. As a reward for their endeavors, annual Easter egg hunts, trout derbies, kite flying contests and star parties are held for the students.

A monthly bulletin called "Timber" is distributed to teachers and other interested persons to keep them informed about the progress and activities at the park as well as important conservation items of interest.

ESEA Title I funded a Project SENSE (Student Exposure to Natural Science Environments) during the 1969-70 school year. This program allowed 30 educationally disadvantaged children from grades 7 and 8 to examine the natural envirionment. Hartsuff Park again provided an area for this study.

During this past summer students in grades K-6 used the outdoor classroom for an enrichment program in Natural Science. The children studied animals, rocks, weather, stars, oceans, plants and current conservation programs.

Date project operational: 1967
No. of students involved: 4,000
Approximate yearly cost: \$500 (for materials)
Source of funds: School budget and ESEA Title I
Dissemination materials available: Slides and movies on loan

### 81. Children Exchange Environments

LINCOLN SCHOOL and DeBERRY SCHOOL,
Springfield 01103; GRAVILLE ELEMENTARY
SCHOOL, Granville 01034
Superintendent: (Springfield) John
Deady
Reported by: Mrs. Lorraine Ide, Elementary Science Supervisor
Information contact: Mrs. Lorraine Ide,
413-733-2132



Administrative contact: James Buckley, Assistant Superintendent, Springfield Fublic Schools, 195 State St., Springfiel: 413-733-2132

Last May 70 children from Springfield inner-city schools spent a full day with children from a village school in tranville, a rural community 30 miles away. Three weeks later, Granville students were invited by Springfield for a day's visit to the city. "The purpose of the exchange was to sensitize outyouth to their surroundings by teaching others," explained Granville Principal inverett Rockwell.

Preparation for the visit included an exchange of letters, pictures and teraphocks made by the children. Students carefully planned what part of their environment they wanted to share with guests. Thank you letters followed up the visits.

The Granville third graders began their day by taking visitors to an abandoned dump that contained unusual rusty farm equipment used at the turn of the century. After investigating hardwood and softwood trees in a nearby forest, students compared its natural setting to a tree nursery, artificially planted by human heings. Man's effect on the landscape was observed at a gas and power line intersection. The children visited a growing peat bog and then tabled collected materials while en-



joying a picnic lunch.

Afternoon sites included an asparagus and strawberry patch, a brook and a meadow where children could run and roll in the grass. At a dairy farm they petted cows and calves, and watched a demonstration of pruning and spraying in the apple orchards. Some older children hiked to the "ledges" for an aerial view of the village and made maps from their observations.

When Granville children returned the visit, a walk through the city included the new postal center, a hospital and an urban renewal area where huge road-building equipment was operating, a guided tour of the city library, a fire station and a college campus. The group ended up at the Holiday Inn's revolving restaurant on the top level, where the management treated the boys and girls to ice cream and cookies. A concert followed a festive lunch in a city school.

The children evaluated the experience by answering such questions as "What was the highlight of the day to you?", "How would you improve the visit?" and "Why do you think the visit took place Another exchange is being planned for this year.

Date project operational: 1970 No. of students involved: 126 Approximate yearly cost: None extra

#### 82. Arithmetic Games

OTIS MEMORIAL SCHOOL, Otis Air Force
Base, Otis 02542
Superintendent: Clayton Campbell
Reported by: William Sullivan, UNLOCK
Information contact: Mrs. Eloise Fraher,
Teacher, 617-563-2206
Administrative contact: Donald Lonergan, Principal, 617-563-2206

A 14-page booklet of arithmetic games for students in grades 1-3 resulted when the teachers in the Otis Memorial School got together and pooled their ideas. Copies of the booklet were then given to all teachers in the school.

Most of the games require no props, and

the booklet groups them in categories according to skills (practice in enumeration, rote counting, use of ordinals, reading the numerals, practice in use of combinations). "Basketball", "Hide the Pencil", "Find the Chair", "Clap In", and "Streetcar" are the names of some games.

The booklet also includes a short list of books which give arithmetic activities for elementary school children and sample stencils of arithmetic puzzles. Copies may be obtained by writing Mrs. Fraher.

Date project operational: 1970
No. of students involved: Entire school
Approximatel yearly cost: None extra
Dissemination materials available:
Booklet available on request

#### L. Social Studies

### 83. Students Explore Community Economics

MURDOCK JUNIOR-SENIOR HIGH SCHOOL,
Winchendon 01475
Superintendent: Richard Porter
Reported by: Harold Desmond, UNLOCK
Information and administrative contact:
Richard Smith, Chairman, Social
Studies Department, 617-297-1256

Murdock High seniors enrolled in a Relevant Studies class decided to find out just what made their town "tick". Their curiosity was channeled into Project "W", a student-planned and student-directed study of Winchendon economics. Primary concerns of the study included (1) how local businesses and industries met individual economic requirements of Winchendon citizens, and (2) how local commerce relates to state, federal and international economies.

Murdock students developed standardized questionnaires for interviews with local shops, businnesses, banks, factories and the town clerk. Committees then contacted nine representative businesses and set up field trips for the entire class, making sure that key personnel would be on hand to answer prepared questions, and that the class would be able to observe and question employees. Students evaluated and compiled reports in class on the following day.

In addition to economics, students compiled a history of Winchendon, made a statistical population study, and reported local occupational levels, the economic base of the community, and available transportation services and highways in the area. A brief study of local religious practices sparked student interest and was later expanded into a detailed report. Several local newspaper articles were prepared to summarize student findings, as well as a final class report.

According to the students' own summary of Project "W", they now have a better understanding of their community and how it developed. "Most of us, before taking these tours of our community, were real-



ly pressed with the thought of, What's so great about Winchendon? ... After asking the opinions of other students in the class, the best conclusion to state is: 'Our little town is really something.'"

Date project operational: fall 1968 No. of students involved: 30 Approximate yearly cost: none extra

#### 84. World Tours

MILTON ACADEMY LOWER SCHOOL, Milton 02186 (Independent)
Reported by: Dorothy Daddona, Teacher Information and administrative contact:
Mrs. Elizabeth Buck, Principal, 617-698-7800

General Knowledge, a bi-weekly course for fourth and fifth graders, offers special subjects and techniques that may be left out of ever-changing curriculum. Varying with the needs of individual classes, "G.K." has included projects about astronomy, anthropology, art, history and library skills.

One of the program's successful projects has been the World Tours. Classes are divided into "ships" of three or four people who "crew" throughout the project. (A tour lasts 8-20 weeks, depending on the group's interests.) Ships have names, flags and officer assignments, and each one follows an itinerary of about eight stops. These are chosen by the teacher, to include favorite places named by each crew as well as contrasting climates, cultures, and places of special interest.

Each student keeps a log of information about the places he visits, and sends picture postcards (made from 4x6 index cards) to "G.K." Four types of logs require differing bits of information. Captains, for example, find out about forms of government and their leaders; Navigators choose routes and means of transportation, compute distances and travel time and chart it all a map; First Mates and Lieutenants

explore cultures. Post cards describe the stops in a more personal and imaginative way. One First Mate's card found in the class mailbox began, "Dear G.K., I am in Thailand and I just bought some fruit. They are simese and Chinese and have the bigest and fanyest houses I ever saw " (sic).

Thailand

Apail 10, 19 20

Some front. They are simple and I just bought and The big of and fample of house and chinese and have the big of and fample of house and chinese and some the place than they had big unbrokes for the fruit stands. They had big unbrokes for the fruit stands. They had big unbrokes for the fruit to the place the saw a threined big for the forethe of a true and carry heavy lags out of the forethe of the trained. I have to go and I had the best time. By:

Readmentage.

On a wall map, ribbons and flags chart all routes. A ship is considered "in port" when all crew members have sent in cards from that place. Information for the logs and post cards come from travel books, encyclopedias, almanacs, atlases and magazines. The National Geographic School Bulletin is particularly useful, and Miss Daddona has made a file catalogue of its articles. Children are encouraged to learn as much as possible from pictures and to bring in souvenirs from home.

World Tours stresses teamwork; crew members help each other all along the way, and even do some "S.O.S." work for one another.

Date project operational: Fall 1967Spring 1969
No. of students involved: 50
Approximate yearly cost: \$5-\$10 (materials)
Source of funds: School budget

### 85. Mini-Courses in Social Studies

COHASSET HIGH SCHOOL, Cohasset 02025
Superintendent: Nelson Megna
Reported by: John M. Shaw, Curriculum
Coordinator
Information contact: John M. Shaw,
617-383-0023
Administrative contact: Richard Streeter,
Principal, 617-383-0290

To help each student decide for himself whether he would like to pursue some area of social studies in college or in a career, and to provide variety for teachers and students, Cohasset High School offers mini-courses in social studies to all seniors. Each student has a choice of four ten-week courses which are designed to expose him to as many of the social studies disciplines as possible.

Sample course offerings include: current issues in America (drugs, crime, poverty), psychology of adolescence, international relations, religions of Asia, history of Russia, anthropology, sociology, political science. A final examination given at the end of the year consists of four general essay questions relating to man and his society.

Recently the program has been expanded to coordinate with half-year English courses in dramatics, themewriting, etc. This is aimed toward the development of a humanities course approach utilizing mini-courses in English, social studies, art and music. Independent study has also become a part of the program with one ten-week marking period given over to almost complete independent study by seniors taking social studies.

Many variations in these course offerings can be worked out depending on the capabilities of the teachers. Currently, most of the course selection and teacher assignments are being handled manually. Use of a computer would simplify the process.

Date profess operationals enters on

No. of encloses involved: 100 Approximate yearly cost: None extra Dissemination materials available: Course descriptions and letails.

#### 86. Coastal Indian Culture



LYLE JUNIOR HIGH SCHOOL, Otis Air Force Base, Otis 02542 Superintendent: Clayton Campbell Reported by: William Sullivan, UNLOCK Information contacts: Ron Haley and Andrea Pederson, Teachers Administrative contact: Frederick Comings, Principal, 617-563-5635

The town of Bourne recently installed a pilot seventh grade course encompassing geography and ancient history, which includes a unit dealing with the coastal Indian culture of Southerstern Massachusetts. Several students at Lyle Junior High School are descendents of the Wampanoag Indian tribe of Cape Cod, and these students helped set up the basic unit.

Reference material was furnished by Dr. James Deetz and Cathy Gates of Plimoth Plantation (located not far away). Mrs. Amilia Bingham, a local resident who is an authority on Wampanoag culture, came to the school as a guest speaker and clarified many of the points which students brought up.

The gourse traces the levelopment of the doubleast coastal Inlians from the early Paleo culture to the arrival of the white man. Projects included fuilding miniature homen, canoen, weapons, cooking food and making clothes from available local materials. Class time was given to students to collect marerials and work on their projects.

The unit was well received by students, and the teachers felt that studying a culture close to them would help students relate what they learned to other cultures throughout the world.

Date project operational: September

No of students involved: 150 Approximate yearly cost: None extra Dissemination materials available: Course outline

#### 87. Sixth Grades Examine Local Government

SPRINGFIELD PUBLIC SCHOOLS, 195 State St., Springfield 01104 Superintendent: John Deady Reported by: Michael C. Fioretti and John A. Murphy, Principals Information contact: Michael C. Fioretti, Liberty Elementary School, 962 Carew St., Springfield 413-733-2123 Administrative contact: John Deady,

413-733-2123

At a School Committee meeting, a student shouts, "Point of Order!"; another student questions the mayor, "Will there be heavy traffic in the area of this proposed new school?" An estimate for funds to finance a new sports stadium is given. A sixth grade councillor asks the city auditor, "How will we get the money?" "By floating a bond," replies the auditor who then explains the terminology. This all took place at Springfield's Mock School Committee meeting last spring, as part of a ixth Grade Assembly" program.

Two elementary principals, impressed with a othernt accembly on Massachusetts government organized by Tufts University, suggested a similar plan in 1963 for mixth grade Springfield students, Inse that level's curriculum already included the study of local, state and national governments. Students and teachers were asked to give suggestions for exploring local government and education, and an assembly program was then planned for the next fall.

Students tour every area of the city (malls, urban renewal sections, homes for the elderly, roadways, conservation areas, the downtown district, etc.). They study parliamentary procedure, elect representatives to mock sessions, and write up problems for formal presentations. City officials and members of the Chamber of Commerce visit classrooms for lectures and discussions.

In 1969 the program's broad range of activities centered on the future of Springfield and culminated in a mock meeting of the City Council and the School Committee. (These include the city's top elected officers.) Representatives of the sixth grade classes were seated with council members at City Hall and assumed their roles, using the adults only for resource information. The council President chaired the discussion of student proposals for a sports stadium and for two local helioports. In a similar fashion students assumed school committee member roles to to discuss their own proposals. As he does for all meetings of the Springfield School Committee, the Mayor served as chairman.

Through the Sixth Grade Assembly program, students begin to know their city and their government - its organization, its problems, and its future. After viewing one mock session, a parent exclaimed, "This is dynamic education in action!"

Date project operational: No. of students involved: 2500 Approximate yearly cost: \$200 (for Source of funds: City budget

### 88. Multi-Media Approach to Cultural Studies

CHELMSFORD PUBLIC SCHOOLS, 31 Princeton St., North Chelmsford 01863
Superintendent: Thomas L. Rivard
Reported by: Charles L. Mitsakos, Social Studies Coordinator
Information and administrative contact:
Charles L. Mitsakos, 617-251-4961

How should social studies be taught in the Chelmsford Schools? After grappling with this question and developing their own rationale, a group of Chelmsford teachers began looking for what was available which correlated closely with their ideas. This search led them to the University of Minnesota's Project Social studies and resulted in a curriculum which is now involving the whole community.

A grant from the Chelmsford School Committee enabled a team of teachers to pilot the Project Social Studies Units in grades 1-3 during the 1967-68 school year and make revisions in the units the following summer, adapting them to local needs.

In fall the program was used in all primary grades and during the next two years it was tested and implemented in a similar manner through the middle school level.

Chelmsford Social Studies Coordinator Charles Mitsakos, feels that success in social studies should not be based soley upon a student's ability to read, and that many social studies objectives can be achieved more effectively through the use of audio and visual media. This is why the program encourages teachers to use a variety of resources and materials.

Resource units for teachers contain suggested materials and background reading for the teacher and describe course objectives and teaching strategies. Multi-media kits, shared by small groups of teachers, contain books, transparencies, filmstrips, film loops,

recordings, audiotapes, study prints and artificts. Teachers also have access to the school system's film library and to a series of videotaped lessons developed for the program through Chelmuford's instructional television system.

Flexibility in classroom organization and style of teaching is encouraged. Each student obes not have his own book, since many different books are used. Study prints and taped materials are available for students who have reading difficulties.

Much of the subject matter deals with the ways families are organized in different cultures compared with the students'own way of life.

One of the main purposes of the program is to help children understand why people of various cultures act differently, why they believe and value different things and why their behavior seems natural and right to them. Another goal is to help students develop inquiry skills--gathering and analyzing data data. An interdisciplinary approach is used which relates sociology, anthropology and economics.

Parent involvement plays an important part in the program. Newspaper write-ups, demonstration lessons at PTA meetings, and the dinner table conversations of enthusiastic students have helped generate a good deal of community interest. Teachers send home notes concerning the various units and parents often provide artifacts for use in the classroom and serve as resource people.

When second graders were studying life in colonial days, each class had an opportunity to "live" for one day as their forebearers had in an authentic colonial house restored by a local historical association. Volunteer mothers in colonial dress supervised as the children dipped candles, churned butter and carried on other home activities.

Mr. Mitsakos attributes the success of this social studies program to a "dynamic, imaginative staff and community commitment and support".

Tiro project querari mais l'eptember 1967

its. If attribute involved: 5270 Approximate implementation cost:

Derman of finals: Ochool budget, Title

Dissemination materials available: Written report and sample unit

#### 89. Man: A Course of Study

MT. EVERETT REGIONAL HIGH SCHOOL, (Alford, Egremont, Monterey New Marlborough, Sheffield) Sheffield 01257
Superintendent: Paul J. McDonald
Reported by: Bernard J. Frye, Workshop leader

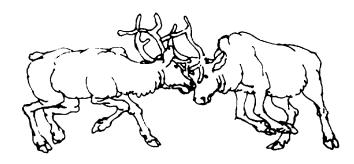
Information contact: Bernard J. Frye, 413-229-8734

Administrative contact: Raymond Chamber-land, Vice Principal, 413-229-8734



Developed by the Education Development Center, Inc., MACOS was adopted by Mt. Everett's fifth grades in 1969. As a basic anthropology course stressing aspects of psychology, sociology and biology, MACOS focuses on Man-on his nature as a species and on the forces that shape that human nature. The curriculum asks three basic questions: What is human about human beings? How did they get that way? How can they be made more so?

Using a group of four team teachers, ch with specialized talents, classes



explore the origins of man's behavior by comparing selected animal groups such as salmon, herring gulls and baboons. For example, a unit describing the life cycle of the salmon, where parental protection of offspring is absent, results in questions about the need for parental protection in human beings. One student asked, "If a salmon can live without parents, why are human beings born so helpless?"

The MACOS curriculum is oriented toward film; in addition to presenting facts dramatically, most MACOS films help to develop observation skills in students by excluding narration.

The study of the Netsilik Eskimos, which is the concluding unit, investigates culture concepts. Simulation games such as caribou hunting with bow and arrow and the seal hunt are an integral part of this unit. The children follow an Eskimo family in their struggle for survival. By examining similarities between themselves and a group which at first seems so different, students begin to discover just what is human about human beings.

As professional support for this program, E.D.C. sponsors multi-media workshops for teachers.

Date project operational: September 1969

No. of students involved: 130
Approximate yearly cost: Salary for one teacher, \$200 for materials
Source of funds: School budget
Dissemination materials available:
Brochures

### M. Reading/Elementary Language Arts

## 90. A Comprehensive Reading Room

EVERETT PUBLIC SCHOOLS, 548 Broadway, Everett 02149 Superintendent: Arigo LaTanzi Reported by: Joseph Hannigan, UNLOCK Information and administrative contact: Agnes Nunes, Director of Reading Services, 617-389-7950

Two years before reading became a top educational priority in the U.S., it was considered number one by the past three years they have developed a comprehensive reading program for all public schools as well as for three parochial instituion.

The staff includes a full-time director who co-ordinates reading services and 17 reading specialists (one for each building up to the ninth grade); Classes are usually kept on a 1:6 student-teacher ratio, or less. Adjustment and guidance counselors work closely with the staff, and each building now has a central library run by teacher aides and parent and community volunteers.

To deal with special problems, the reading department set up classes for perceptually handicapped children, and a reading clinic housed in one school handles serious reading problems. The clinic contains a variety of audio-visual equipment and individualized learning materials, and is open during the summer in addition to its normal schedule. Last summer almost 300 children from grades 1-3 attended 6-week sessions. Specialists work with students on a one-to-one basis until their difficulities are corrected.

An independent evaluation team interviewed parents, classroom teachers and administrators, and visited

reading "classes." Their report based on the 1969-70 school year, indicated that aside from some specific and fairly minor recommendations for better facilities at some locations, and for improved communication between parents, reading personnel, and other teachers, the Everett program is successfully improving reading interest and achievement among pupils.

Date project operational: 1967
No. of students involved: 818
Approximate yearly cost: \$226,100
(personnel \$219,700, materials
\$6,500)
Source of funds: 40% ESEA Title I
60% local funding

### 91. Typing for Elementary Children

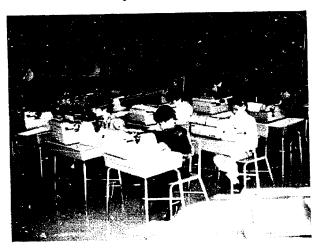
JOHN A. PARKER SCHOOL, 705 County St.,
New Bedford 02740
Superintendent: James R. Hayden
Reported by: Mary A. Kenneally, former
Assistant Superintendent
Information contact: Edward F. Correia,
Teacher, 617-977-4511 x51
Administrative contact: Florence L.
Mahon, 166 William St., New Bedford
02740 617-4511 x46

By the time Parker Elementary students have finished the sixth grade, they have practiced typing for three years. All fourth, fifth and sixth graders take part in weekly 45-minute typing classes run by two parent volunteers. The classes cover basic business and correspondance forms as well as typing techniques, so that students soon begin to type reports, research material and other kinds of homework in addition to their typing assignments. Twenty typewriters were donated by the high school, and students are free to use them for their own work before and after school and during some free periods.

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Special classes are held each day for gifted children. Teachers and the principal decide every spring which students can afford to miss a period in the day for extra typing practice. An equal number of boys and girls from various classes are chosen, and the program has become one of the highlights of the day according to Principal Edward Correia. Everyone is careful to remain in good standing and attendance is consistently high.



Mr. Correia reports that some families have even bought typewriters because of their children's interest.

Date project operational: March 1968 No. of students involved: 140 Approximate yearly cost: None extra

#### 92. Friday Films

LAKE STREET SCHOOL, Spencer 01562
Superintendent: Edward R. McDonough
Reported by: Roger Charette, UNLOCK;
Mary E. Madden, Principal
Information and administrative contacts:
Mary E. Madden, 617-885-2824

Have you ever stopped to think how it feels to be a kindergartener or first grader in a big, new school? To help these little people overcome some of their fears and become better acquainted with the other children and teachers the Lake Street School holds a weekly fights trip program in the multi-purpose

Each class takes a turn selecting the two filmstrips and conducting the program. During the filmstrip showings, the children discuss what they see and learn to listen observe and applaud. Later they draw illustrations of what they enjoyed the most, and the children in the room responsible for the program choose the picture they feel is best. This pictue is "hung" in the main corridor in a lighted frame (made by the custodian) for everyone to enjoy and appreciate.



By mid-year some of the first-graders can read the film captions. They are given an opportunity to stand on the stage and read them to the audience. This encourages others to work toward the same achievement.

Date project operational: September

No. of students involved: 255
Approximate yearly cost: None extra

### 93. Elementary Creative Dramatics

WALTHAM ELEMENTARY SCHOOLS, 205 Beacon St., Waltham 02154 Superintendent: James Fitzgerald Reported by: Robert J. Eagle, Director, Drama Department Information and administrative contacts: Robert J. Eagle, Mrs. Mavis Serries, Drama Teacher, 617-873-8050 x356

As part of a K-12 drama program initiated in Waltham, a full-time specialist began a creative dramatics course for second graders last fall.

For one semester dramatics teacher Mrs. Mavis Serries visited each second grade section weekly for a 45-minute period, and worked informally with students. A typical lesson early in the semester involved telling a story, which was frequently related to other curriculum studies, and having the children recreate dramatically what they had heard. Later on sessions became more creative, with most of the ideas and suggestions coming from the children themselves.

In an evaluative seesion, second grade teachers unanimously endorsed the program, and cited numerous examples of shy youngsters "coming out of their shells". Although some sections include over 25 children, and seem too big to encourage much creativity or discourage self-consciousness, teachers and students are enthusiastic about the program, and it has expanded. The dramatics teacher has followed the students to grade three, and is conducting an after-school workshop for second grade teachers in the hope that they will be able to incorporate her work. Drama Department Director Robert J. Eagle hopes the program will be expanded even further.

Date project operational: September 1969
No. of students involved: 700
Approximate yearly cost: Salary for one teacher

Source of funds: School budget

#### 94. Paperback Productions

ASHLEY SCHOOL, 122 Rochambeau St.,
New Bedford 02745
Superintendent: James R. Hayden
Reported by: Teresa M. Gaffney, Teacher;
Stacia Gorczyca, Principal
Information contact: Mario Jardin,
Teacher
Administrative contact: Mary A. Keneally,
166 William St., New Bedford

Paperback books are an integral part of the fourth grade classroom library at Ashley School. But students don't just read someone else's books; they make their own!

Taking a book they enjoy reading, each child makes a "filmstrip" out of it. The reading levels of these paperbooks ranges from second grade to sixth grade, reflecting the individualized reading rates found in class. A ten-foot section of ordinary white shelf paper, which could be divided into as many as 10 or as few as 5 sections, makes up a filmstrip. Title pages and picture summaries are included.

A creative parent donated a wooden filmstrip projector, and the filmstrips were shown to the rest of the class as well as other grades through the building; students gave oral presentations, and "toured" to exhibit their final products.

The program has been so successful that it has expanded to the fifth and sixth grades. Principal Stacia Gorczyca reports that the paperback books do go home, and in some cases parents read them as well as the children.

Date project operational: January 1970 No. of students involved: 27
Approximatelyearly cost: \$20 (for materials)
Source of funds: School budget

### IV. Experimenting with the Total Program

#### 95. Shattuck Street Elementary School: Budget Cut-Back Spawns Innovative Program

SHATTUCK STREET SCHOOL, Littleton 01460 Superintendent: Richard E. Dejarlais Reported by: Arthur Covell, Principal Information and administrative contact:
Arthur Covell, 617-486-3866

Can a small town school faced with a reduced budget and a conservative community foster enthusiasm and support for educational innovation? The administration, teachers, parents and students of the Shattuck Street School in Littleton are proving they can through a plan called the Beta-Gamma Program, in which about one-half of the student body is involved in a multi-graded, differentially staffed learning situation.

ERIC e staff is concentrating on

providing a more humanistic and individualized approach to education by using paraprofessionals, technological equipment and continuous learning centers to maximize opportunities for pupil success and involvement. The program stresses greater freedom and responsibility for students and a more professional role for teachers. Most important to the taxpayers of Littleton, the Beta-Gamma Program is saving money and space in the school.

The Shattuck Street School is one of two elementary schools in the town of Littletown. The elementary population has been divided between two schools so that the primary-age children attend the Shaker Lane School while about 400 third, fourth and fifth grade children go to the Shattuck Street School. This school also houses the office of the Superintendent.

The situation that allowed implementation of the new program is important to understand. For several

years Shattuck Street Principal Arthur Covell and his staff have been working to develop an individualized reading program to free teachers so they could provide more attention to their students and allow each to work at his own pace. Cassette tapes, earphones and other technological aids were purchased.

The program was working well, and new teachers were being added when local circumstances imposed strict budget restrictions on Shattuck Street. With several teachers leaving, new teachers to be hired, and a budget cut-back, the school was in a difficult position. Then Principal Covell presented the Littleton School Committee with an educational program they could not afford to ignore. The new program proposed improved services and quality education for students while saving about 25% of the salary costs of running the school.

The idea was to set up two large learning centers, each capable of serving many more children than single classrooms, but staffed by only one professional. A favorable student/teacher ratio would be maintained in the learning centers by hiring paraprofessionals trained to handle many of the daily responsibilities of classroom teachers at a great saving to the budget. The teachers would then be free to assume more professional roles.

By handling from 35 to 50 or more children at any one time, the learning center organization would free one extra classroom which could be used for individual and small group projects or tutoring for children with learning problems.

It was further suggested that the program be multi-graded to allow for individual student progress while breaking down the arbitrary grade labeling. It would be differentially staffed to provide for the development of professional expertise. Such an organization would provide a logical continuation of the primary program the Shaker Lane School where a non-

graded philosophy is favored. Children would have greater freedom of movement, more choices in their learning activities and some unscheduled time during the day to pursue their own interests. Also basic to the program was the belief that the students should have a greater voice in their own government.

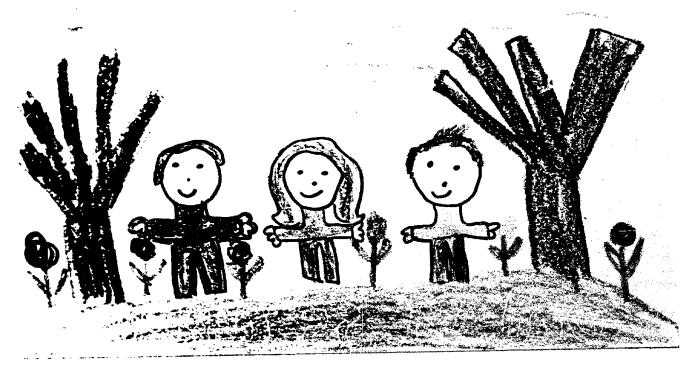
The reorganization plan for the Shattuck Street School included a written statement of purpose: "The development of quality human relationships is a primary concern of all education, and all children have a basic right to be treated with dignity, warmth, and compassion." The school committee approved the program.

Five teachers from the third, fourth and fifth grades volunteered to take part, and three paraprofessionals were hired. To prepare for their new roles, the five teachers, the principal and the paraprofessionals attended a three-week summer workshop that provided both practical work in the use of educational technology, and seminars on learning psychology and the growth and development of the elementary-age child. The workshop ended with a continuous three-day human relations session.

Parents and students were offered a choice. Students could take part in the Beta-Gamma Program or they could choose the regular graded classes where students would still benefit from the same individualized program and new curriculum materials but receive greater supervision in a more traditional classroom organization. From the volunteers, 35 third graders and 160 fourth and fifth graders were finally selected to take part in the Beta-Gamma Program which began in September 1970.

As the school is currently organized, the Beta Program refers to one learning center serving children from the "third grade" age bracket. The center is self-contained, staffed by a professional and one aide, and has no ability groupings. The Gamma Program

# BIONE SSIS NOT Being



refers to students in a fourth-fifth mix. A double classroom serves as the Gamma Learning Center, and it is staffed by a Language Arts professional and two aides.

The rest of the student body remains in grades 3,4, and 5 but benefits from modified team teaching within each grade. New curriculum programs are an important part of the "graded" Shattuck program.

Mr. Covell feels change should not happen too fast and that the community must know about and be involved in changes in the schools. Taking seriously the principal's statement that the school belongs to the parents and the students, 26 parents have volunteered to provide assistance in office work, art, math, etc., whenever their help is requested.

Street, meets with the principal on a regular basis to discuss the operation of the school and the school's programs. They visit classrooms and other areas of the school in order to understand the programs being offered. Their function is to work with the staff in developing programs to explain what is happening in the school.

They also review, discuss and help restate existing policies and procedures. They act to channel grievances and complaints from the community to the proper agent in the school and to dispel misconceptions parents might have about the programs. They also have run a Book Fair, written a newspaper article about school activities and assisted teachers in giving seasonal programs.

Such contact with the public is important since various problems have arisen as a result of the new programs. Currently, there is local disagreement

concerning how much freedom the Beta-Gamma students should have. Since these students have a major role in their own discipline and government, there has been concern over their gum chewing, free access to the library and passage through the halls during class time. Most rules concerning these issues have been strict school policy in the past and rejection of them has posed an in-school threat.

One issue that has involved the community and even the Littleton Teachers Association concerns a policy of allowing teachers to be addressed on a first name basis. All teachers were given the option of being called by their first names. The majority of Beta-Gamma teachers felt this would provide a warm atmosphere in which students could look upon teachers as their friends. Other professionals, concerned with the lack of respect, brought the issue to the school committee.

It is still far too early to measure the success the Beta-Gamma program has had in reaching its stated goals, but it is generally agreed that most students have adjusted well to the less-structured program, and have thrived under increased responsibility. Laurie Crane, Gamma Language Arts reacher, says the children have adjusted very well to new groupings. She does not even know for sure which children used to be fourth or fifth graders and she never thinks of them in those terms. She feels the new program has released more creativity in the students. There are prob- ! lems, but she is committed to the new approach and proud to be a part of it.

Right now, continuation of the program depends on the community. Mr.
Covell is convinced the Littleton community can indeed foster educational innovation without increasing the school budget, provided the schools have the support and trust necessary to succeed. The program has had problems and of course there are still many needs such as carpeting, more audiovisual aids and curriculum materials,

but in the long run the success of the program will be measured by its product - the students, and their progress after several years spent in a school that stresses specialists, humanism, warmth and success rather than competition or dependence on consultants and 'Faddish' hew approaches to curriculum.

Date project operational: September 1970

No. of students involved: 160
Approximate yearly cost: \$27,500 (personnel \$5,940, materials \$21, 560)
Source of funds: School budget

# 96. Northfield and Mt. Hermon Schools: More Options for Students

NORTHFIELD AND MOUNT HERMON SCHOOLS,
Northfield,01360
Reported by: John M. Ravage, Director
of Public Information
Information and administrative contact:
William Compton, Director, 413-4985311

Independent college preparatory schools, Northfield (for girls) and Mount Hermon (for boys), are conducting a joint curriculum based on the assumption that students should have a chance to develop their diverse abilities and interests, and should be introduced to key ideas of human experience which exceed the basic requirements for college entrance. Although the major goal of the preparatory schools is to meet general college requirements, Northfield and Mount Herm n have devised an educational program in a trimester format based on electives and interdisciplinary studies to provide quality college preparatory education with a number of options.

Before dealing with the electives or enrolling in an interdisciplinary program, students must satisfy basic requirements such as a term of American History and English requirements in-



93

cluding elements of language, reading, oral English, composition, and an introduction to poetry and fiction. Also included at this level is a course in Religious Studies dealing with an introduction to religious themes and the Old and New Testaments.

The required curriculum in math and modern languages is based on achievement and courses are generally designed as stepping stones. Students may skip a term by demonstrating proficiency, or repeat a course until proficiency is acquired. The trimester plan has been adopted in a large part because it not only enables students to repeat promptly when necessary and still stay within their class, but it also makes possible individual success within a large number of electives.

After successful completion of the required courses in History, English and Religion, students may select from a wide variety of specialized electives. Electives in the social sciences include Utopianism, Minorities, Afro-American History, Civil Liberties, Constitutional History, and Americans in Asia. English electives are: Voices of Black America, The American Dream, Non-Western Literature, Modern Theatre, Shakespearean Drama, Contemporary Poetry, and Russian Literature and Thought. Religious Studies electives offer Psychology of the Christian Faith, Rediscovery of Ethics, Religion and the Arts, Literature and Christian Faith, Philosophy of Religion, Contemporary Religious Thinkers and a course entitled "Being Human".

Having completed several electives, upper-classmen may then select from interdisciplinary programs. As these programs represent the coming together of thoughts and skills from numerous disciplines, the Northfield and Mount Hermon feeling is that the requirements and electives serve as a pre-requisite for dealing with them.

One interdisciplinary program, Man and Mass Society, strives to bring the tools of literatue, the social sciences and religion to bear on contemporary

problems. Since the students will inevitably bring different backgrounds and
course exposures with them, the result
is that this program is more than
a combination of disciplines. It provides the students with an opportunity
to explore topics of common and vital
concern.

Another interdisciplinary program, Environmental Pollution, is an ideal vehicle for demonstrating and using the tools of social and natural sciences in attacking a critical contemporary problem. This spring a program entitled Women in Contemporary Society is being offered at Northfield. It will treat historical aspects in ancient Greek literature and civilization, and move on to contemporary reflections of women's social role as portrayed in such films as "Rachel, Rachel".

Now under consideration for next year is a full term devoted to "The Mountain". This would include exposure to literature, the arts, geology, ecology and the actual physical skills necessary to explore mountains and live and work together out-of-doors in a close-knit team of students and adults. Such a program would further emphasize the unity and interdependence of human experience.

Because the trimester plan allows for an increased number of electives, new areas of study have been opened such as anthropology, sociology and psychology. Mathematics students may go on through analytic geometry to courses in probability, abstract algebra and calculus.

The trimester system has also facilitated term-long projects and other off-campus activities. Off-campus projects have included a study of tribal origins in Arizona in cooperation with the Bureau of Indian Affairs and a study of re-training methods for children with learning disabilities at Eagle Hill School in Hardwick, Massachusetts.

In the fall of 1970 the two schools instituted a term abroad for qualified juniors and seniors so that students might do intensive work in languages and area studies while living with a

family in France, Germany or Spain.

In the fall of 1971 Northfield and Mount Herman will become one co-educational school, combining the two campuses. Because of the joint curriculum and the co-educational electives already offered, the merger under a single board of directors will provide a consolidation of the existing program described above, currently offered at both schools.

Date project operational: September 1970
No. of students involved: 400
Approximate yearly cost: None extra

#### 97. Cambridge Pilot School: Education School and Community Work Together

RINGE TECHNICAL HIGH SCHOOL, Broadway at Irving St., Cambridge 02138
Superintendent: Frank Frisoli
Reported by: Joel Sirkin, Coordinator
Information and administrative contacts:
Joel Sirkin and Steve Goldberg, 617491-4434, 491-0070

On the fourth floor of Ringe Technical High School the walls have been painted bright colors--purple, orange and green. Irregular spaces have been created by the use of decorated dividers, making classrooms a maze of small seminar and study spaces. Staff and students can be seen relaxing together with a game of ping-pong in the office. Armed with 8mm. movie cameras, some students go off to Harvard Square on a film project while others go to paying jobs in the area or sit down with members of the staff to discuss a point of school policy.

This is the Cambridge Pilot School, an experimental sub-school included within the regular Cambridge High School buildings, but addressed to its own unique goals. Established in cooperation with

the Harvard Graduate School of Education, the Pilot School is exploring what happens when students participate in school decision-making and enjoy greater autonomy and responsibility in their educational choices.

In its second year of operation, the School has a student body of 120 - 60 tenth graders who are in their second year with the School and 60 ninth graders who began this fall. Students are selected from a list of volunteers. Care is taken to select a representative cross section of the city's ninth graders with an age, sex, race and I.Q. range comparable to the general ninth grade population. Officially, students remain enrolled in either Ringe Tech or Cambridge High and Latin. Staff includes teachers from the two high schools who have elected to teach in an innovative environment, as well as parents, community volunteers and teachers working on advanced degrees at Harvard Graduate School of Education and professors from the University.

A major goal of the school is to explore the possibility of involving students in every aspect of school governance and planning. Before the school opened in 1969, all students and staff joined in a summer workshop which planned the physical layout of the school, experimented with alternative methods of learning, and planned various parts of the curriculum. That session used a Town Meeting form of government, the first of a long series of experiments in decision-making.

Student-faculty councils, open staff meetings, judicial committees, student courts, written constitutions, demerit systems, all have been tried in the search for humane, non-coercive social relations and effective decision-making. The school began without a specific discipline policy, and has been building up a "common law" of precedents from specific events and solutions. In this second year, there is a governing Council, made up of student, staff, and parent representatives. Students were involved in the hiring decisions for the second year, by interviewing candidates



and making recommendations to a staff hiring committee.

Some of the acute pressure for a government system has been removed by effective personal relationships between individual staff and students within which problems can be worked out. Each staff member advises five students; there is no separate guidance staff. There are no study halls, so students and teachers share a common lounge. The "personal" quality of the school was mentioned most often by staff, students, and parents in their evaluation at the end of the first year.

Another major goal of the school is to utilize learning environments outside the school building, and materials and individuals not commonly found in schools. Film and videotape are constantly used throughout the program to document activities, spur student creativity, and generally to make accessible the two major media of the decade.

Students leave the building often for interviews(including Cambridge Mayor Alfred Velluci and Josiah Spaulding's campaign staff), and to observe history-in-the-making (as a group did at the eviction of North Harvard Street tenants after their ten-year war with the Boston Redevelopment Authority last year); students also use other cultural resources in the area (museums, libraries, etc.).

An Urban Studies group has spent two months studying the impact of MASSPORT plans in that area. The students have been in churches, neighborhood centers, government offices, and private homes in their search for the facts. In an elective course entitled "Field Experience" students can receive credit for exploring specific work settings outside the school for a quarter term. Sites have included a movie theater, elementary schools, a newspaper, a bicycle shop, and a radio station.

Two students interviewed admissions officers of area colleges to check on acceptability of students from

innovative secondary programs. Last year staff and students traveled to a conference in Toronto on "Alternative Schools," and groups have addressed gatherings of teachers at various institutions across the country.

On the other hand, community people, artists, political figures, and parents are encouraged to come into the school to teach and help in other ways.

Two parents serve on the school Council, and parents interviewed one another in connection with the evaluation of the Pilot School's first year. Parents have also helped the school by accompanying field trips and hosting classes in their homes.

Periodic mailings about school activities are sent to parents and they are encouraged to visit the school or call at any time. Teachers and advisors keep in close touch with parents about student progress, and written comments are sent with every report.

The school operates on the premise that, if a student is allowed to select his own courses, he will have a greater commitment to attend and perform successfully. Students are free to elect courses at the Pilot School or classes at Ringe Tech and Cambridge High and Latin. Within the Pilot School there is no ability grouping or tracking, and the only requirements are English and a period called Home Group. State law also dictates that students must have a minimum number of hours in physical education.

The English courses, created by the staff and students, offer broad choices and make use of various media. Students had a choice of seven topics this fall: Time Capsule, Myths, Sports, Multi-Media, Afro-America, Experiements in Experience, and a course called Monsters, Ghosts and other Imaginary Beings in Literature. Grammatical structure is discussed as needed individually, not by drill.

Home Group, the other required course,



provides a time in which students can work on group-initiated planning. Approximately 10-12 randomly chosen students and two teachers make up a Home Group. Teachers refrain from initiating any action and all projects, planning and budgeting must come from the students. This situation created some problems until students were ready to accept the responsibility of working together without waiting for reacher guidance.

Other available courses include such regulars as algebra, geometry, foreign languages, general science, and physics along with more innovative electives such as law and student rights, photography, urban studies, card playing, and anthropology. Many students ended up with a balanced program of English, Home Group, a language, a science, and a math course; others made full use of the school's options and are taking two English courses or several maths at once.

The School is committed to studying its own operations; three people are currently working on various research projects. A major report on the first year gave some encouraging data: attendance at the Pilot School was excellent, averaging 94% for the year, as compared with 70-80% for the city's other ninth grades. Achievement tests showed students a year advanced in math, and almost exactly on grade level in reading.

Student involvement in many phases of school life was very high, with students even volunteering to return to their home elementary schools to recruit for the school's second year. During the first year, only one student of the sixty enrolled chose to return to the regular system. Parents reported great satisfaction with the new school's effect on their youngsters both academically and in terms of increased maturity.

With sc many innovative aspects—curriculum structure, government, parent involvement, use of outside environments, university input into the school system, etc.—it is not surprising that there are many loose ends still to be worked on. A major effort during this second year will be increased communication with the Cambridge school system and elsewhere to identify Pilot School practices which can be transferred to other schools or be made part of other, more traditional programs.

Date project operational: June 1969 No. of students involved: 120 Source of funds: U.S. Office of Education

Dissemination materials available:
First year report, Research Dept.
Studies of the Cambridge Pilot
School



### V. School Management

#### 98. PPBS

BROOKLINE PUBLIC SCHOOLS, Town Hall,
Brookline 02167
Superintendent: Robert Sperber
Reported by: Ferdy J. Tagle, Jr., Assistant Superintendent for Funds and Facilaties.
Information and administrative contact:
Ferdy Tagle, Jr. 617-734-1111

PPBS stands for Planning Programming Budgeting System, a systems approach to planning, forecasting and evaluating expenditures by program which has been used by the Department of Defense for a number of years. As the budget pinch grows tighter, a number of school systems are finding PPBS can be a valuable tool for reassessing budget priorities, reallocating resources, forecasting the long-term cost of new programs and finding out the actual cost of existing programs.

During the spring of 1968 the Brookline School Committee accepted a proposal by Assistant Superintendent for Funds and Facilities Ferdy J. Tagle, Jr. that the school budget be rearranged into a program format which would group expenses by each curriculum and support area rather than by the traditional line items which lump all textbooks and teachers together under the category of Instruction. This was done in the 1969 budget for the program areas of science, mathematics and art.

The school committee also set up a task force of administrators, teachers, finance committee and school committee members to study the preparation and presentation of budgets. In June, 1970 the Task Force recommended that the school committee endorse the PPBS concept and proceed with its implementation. This is now being done in three stages, and Dr. Tagle expects the process will take five years to complete.

Stage I involves determining the program structure. Brookline divided its budget into 35 program areas, grouped under two major categories: instructional services (including all curriculum areas) and support services (administra-



tion, athletics, library, school lunch, school plant, transportation, and the like). Data processing equipment has made the job easier for Brookline, but Dr. Tagle cautions other school systems not to get bogged down in this stage.

Stage II involves a group effort to develop goals and objectives for each program area. This is where Brookline is now. The staff has defined goals as "broad statements which are timeless and curricular in nature", and objectives as "statements of an explicit nature, existing within a specific frame of time and, whenever possible, subject to evaluation".

Since this stage is so important, Dm. Tagle advises that only a few programs should be developed at one time, followed by other programs in future years. A consultant is assisting the Brookline staff with this phase of the project.

Stage III includes program analysis and the development of alternate methods for reaching program goals (such as different staffing patterns, curriculum changes, and the like).

Level	Туре	Description							
ı	Total System	Tatal School System							
11	Program Families	Instructional			Support				
111	Programs	Sci.	Music	Moth	(similar areas)		Library	Pupil .	(similar areas)
IV		Biology ( Chemistry	Inst, Vocal	K-3 4-5 Geom				Health Guld. Attend	

SCHEMATIC PROGRAM STRUCTURE

According to Dr. Tagle, PPBS will eventually involve three to five year budget forecasts and will clearly indicate the long-term savings or costs of any program changes. Although the implementation process is a long one and it is difficult to work out program objectives and to figure out how to measure success, Dr. Tagle is enthusiastic about PPBS.

He sees it as a definite aid to program planning and a means of getting

more participation by teachers in decision making. Also, he feels it is an effective means of making the public more aware of what the schools are trying to achieve, how they expect to get there, and how the results will be evaluated.

"PPBS gives the school committee and the community a better opportunity to establish their own set of priorities concerning programs. For instance, it's easy to see how much you spend for athletics as opposed to art," Dr. Tagle explains. "We don't expect miracles and fantastic savings in tax rates, but in the long run we hope to make our budgets better understood and to get more support for them. We also hope to eliminate duplication of effort. Even though we haven't yet reached the analysis stage, I can already see areas where we could be doing things more efficiently."

Date project operational: 1970(Phase I)
No. of students involved: 7000
Approximate cost of implementation
and development: \$4500 (\$3000 for
consultants; \$1500 for workshops
and materials)
Source of funds: School budget
Dissemination materials available:
Free copies of "A Strategy for
Implementation of PPBS"

## 99. Computerized Bus Scheduling

ACTON PUBLIC SCHOOLS and ACTON-BOXBOROUGH REGIONAL SCHOOL DISTRICT, Charter Rd., Acton 01720
Acting Superintendent: Alan White Reported by: Beverly Lydiard UNLOCK Information contact: Penny Dunning, IBM, 1730 Cambridge St., Cambridge 02138 617-236-5528

Although a number of Massachusetts towns are considering the possibility, Acton is the first town in the Commonwealth to fully computerize the schedul-



ing of its school buses. One of the fastest growing towns in the state, Acton has an area of 20 square miles and a student enrollment which has been doubling every six years since 1953. During the past five years, the town has opened a new junior high, and two new elementary schools, with a third elementary school scheduled to open this fall. Currently 4600 students (grades 1-12) are being bused to the town's two secondary and five elementary schools with each bus making three runs per day.

First step in implementing Acton's program was the preparation of detailed information for the computer: a complete analysis of the town's road system, including actual or potential stops; information concerning how fast the buses can travel on any given section of road; the number of buses and their capacity; the location of bus stops; the maximum time for each student to be on the bus; and any other tions. The next step is to determine the number of students who will be at each stop for each run.

This information was compiled by the school administration with the assistance of Miss Penny Dunning from IBM. Miss Dunning advised projecting the data three to five years into the future and including bus stops in new subdivisions even though no homes have yet been built there. Doing this cuts down on the number of changes which have to be made in the program, and the computer only considers bus stops at which children are located.

Acton's Acting Superintendent Alan White emphasizes that these steps are critical ones, since the information only comes out of the computer as accurately as it is programmed in. Gathering this information can be time consuming, but if it is done thoroughly and accurately, constant small changes will not have to be made in the computer program.

The final step is to feed all this information into the computer. Then

the computer provides a print-out giving all the bus routes and the number of buses needed. The first computer schedule may not be satisfactory for one reason or another, so one or more variables can be changed (such as the number of children per bus or the maximum length of time any student should be on a bus) and more schedules can be simulated on the computer. Mr. White reports that it took three or four simulations before Acton's present schedule was arrived at.

The whole process used about 25 hours of computer time (70% of this computer time was spent putting information into the computer, and this will not have to be done again for several years). Working out the bus schedules took up the remaining 30% of the computer time.

Paying for computer time on an IBM 360 would have been costly for Acton; however, a local insurance company donated the time during an "off" period (11p.m. to 7 a.m.), and the school department only had to pay a company employee \$10 per hour for opening the building and supervising the use of the computer. According to Miss. Dunning, it is very common for firms to give free computer time to school departments for such purposes.

Comparing computerized scheduling to working out the schedules "by hand", Mr. White finds that only one-third to one-half as much administrative time is needed, once the initial information is gathered. "It doesn't save you the problem of making minor corrections and it didn't save us any buses, but I can see where it might be able to save us some buses in the future," he explains.

Mr. White says the computer comes up with routes he never would have conceived of, and also offers much greater flexibility in rescheduling for a sudden influx of students or a special program, such as early dismissal of first graders during the first few

weeks of school. In addition, the computer helps school administrators weigh cost factors against convenience factors: such as the number of additional buses needed to eliminate standees or to cut down the maximum length of time any student spends on the bus.

Mr. White is now making plans to utilize the computer in assigning each student by name and year of graduation to a bus stop. This information can easily be updated every year and printouts can be given to school administrators and teachers thus saving secretarial time. When the school district has to be reorganized due to the opening of a new school, the new bus schedules can be worked out by putting into the computer a list of the names of the students who will be attending each school.

Date project operational: September 1970

No. of students involved: 4600 Approximate implementation cost: \$2,750\*

Yearly cost thereafter: \$400\*
\* Excluding costs for computer time
since this was given free

### 100. Centrally Prepared School Lunches

9500 x24

EMERSON SCHOOL, Concord 01742
Superintendent: Ralph Sloan
Reported by: Robert Thorburn, Manager of
School Lunch Program
Information contact: Robert Thorburn,
617-369-9500 x59
Administrative contact: William Dolan,
Business Manager, Concord Public
Schools, Stow St., Concord 617-369-

With food and labor costs going up faster than government subsidies, the hot lunch programs at many schools are in a dilemma: they can raise the ire of the local taxpayers and finance committees by asking the town for more money to subsidize the program; they can raise the price of the lunch-which usually doesn't help because it cuts down the number of lunches sold; or they can go out of business.

Concord is among the school systems which have found a fourth alternative-centrally prepared school lunches--as a means of cutting down labor costs, improving lunch quality and even gaining more space for school purposes by converting former kitchens into instructional areas.

According to Robert Thorburn, manager of Concord's school lunch program, the average cafeteria worker produces 13 "A" meals per hour. With the EKCO program of centrally prepared school lunches inaugurated last September for Concord's elementary schools, Mr. Throburn estimates one worker can produce 28 "A" meals per hour.

Standing on either side of a moving assembly line, 12 cafeteria workers can pack 41 lunches per minute into the rectangular aluminum foil containers used in the EKCO program. Each lunch is packed in two containers - one holding the foods which will be heated and the other the cold foods plus a sealed packet holding a napkin, straw and disposable plastic eating utensils. The "hot" containers are sealed with aluminum foil, the "cold" ones with clear plastic wrap and placed on wire stacking baskets. The baskets are piled onto dollies which are rolled into a refrigerated truck for delivery to the schools. The meals are kept in a refrigerator overnight at the school.

Fifteen minutes before serving time, one cafeteria worker puts the hot food containers in a standard convection oven - 240 or 480 at a time for 15 minutes, allows them to cool five minutes and then serves them at the rate of 25 per minute. A 500-pupil school can be served by one worker (with student help) from a 300-400 sq. ft. kitchen area, since the only equipment required is a refrigeration unit, a convection oven and trash barrels.

When students finish eating, they





When students finish eating, they deposit the aluminum containers, plastic silverware, etc. in trash barrels - so there is no need for any dishwashing. Ecologists will be interested to know that every 1000 meals generates 51 pounds of waste. The EKCO Co. is currently developing an inexpensive compactor to help with the handling of this waste.

The new lunch program is bringing changes to the four Concord elementary schools it serves. Teachers at one school decided they would like to convert the school cafeteria into a library and have the students eat lunch in their classrooms. This has created problems for the school's maintenance staff, but everyone seems delighted with the new library.

At another school, the cafeteria is now serving as both a library and cafeteria. This is possible because students can be served lunch so quickly under the new program that the room is only tied up as a cafeteria for an hour per day. At two of the schools the unused kitchen space is being converted to a science lab (utilizing the plumbing already there). The kitchen of another school is to become a general audio-visual room accommodating 25 students. The very small kitchen area at the fourth school is being used as a storeroom.

Mr. Thorburn has been able to use much of the food preparation equipment from the four defunct kitchens in his large central kitchen. He has sold, or plans



to sell, the remaining three dishwashers and three steam tables.

Operating at top efficiency, the Concord kitchen staff is geared to produce 2600 meals a day. Since this is more than the number of lunches needed by the Concord elementary schools, Mr. Thorburn recently began selling lunches to five elementary schools in the nearby town of Maynard which previously did not have a hot lunch program. Mr. Thorburn is investigating the possibility of expanding the program further to include other neighboring towns.

On the basis of his 30 years in the restaurant and cafeteria business, Mr. Thorburn feels the new program is providing students with a tastier, hotter, more nutritious lunch at a substantial saving in preparation cost.

Date project operational: September 1970
No. of schools involved: 4 (elementary)

#### 101. Shared Budget Data

MABCODS, c/o Westwood Public Schools, 660 High St., Westwood 02090

Reported by: Howard Taylor, Member:
100 Crowe, Treasurer

Information and administrative contact:
Leo Crowe, Assistant Superintendent
for Business, Westwood Public Schools, 660 High St., Westwood 02090, 617-326-7500



The Massachusetts Bay Cooperative Data Study (MABCODS) is an effort by the school departments of 23 towns to share up-to-date information: salaries, responsibilities, working hours and fringe benefits of all professional and non-professional personnel (including coaches' pay and extra duty stipends); negotiations; tax information; debt retirement; and a cost per pupil run-down of each area of the 23 school budgets.

Early in June a questionnaire goes out asking for data on everything but the school budget. This is compiled and published in a book which is available by the end of August. The participating towns may purchase three copies for \$50. For non-participating towns, the price is \$30 per copy to help defray the expense of compiling and printing the data.

Late in June MABCODS school departments also fill out a questionnaire giving detailed information about their school budgets for the school year just ended. After being compiled, this information goes out as a supplementary report in September.

MABCODS had its beginnings in 1968 when a group of business managers from the Belmont, Brookline, Concord Lexington, Newton, Weston, Needham and Winchester school departments got together once a month for an informal luncheon meeting to exchange information. Soon the group decided to enlarge and sent questionnaires to 23 other school departments in metropolitan Boston asking if they would like to provide information on a regular basis and join the group. Fifteen responded favorably and MABCODS came into being.

Westwood Schools' Assistant Superintendent for Business, Leo Crowe, agreed to serve as Treasurer of the organization and "sales agent" for the published study. According to Mr. Crowe, MABCODS is not at all interested in expanding, since information gathering would be too difficult if the group were larger. To business managers or school officials elsewhere who would like
to form a similar organization, Mr.
Crowe offers this advice--include
comparable schools in the same area
and keep the group small enough so
information can be compiled and shared
in time to be of value to the members.
MABCODS members and other school
departments which have purchased the
study have found; it particularly helpful in connection with negotiations.

Date project operational: 1968
School departments involved: 23
Approximate yearly cost: \$2,400
Source of funds: Sale of reports
and \$300 per year from each of the
original 8 school departments
Dissemination materials available:
Reports available for \$30 per
copy

### 102. Extending the School Year

EDITOR'S NOTE: In this issue we have gone beyond state borders to look at a school with an extended school year calendar. Since Massachusetts educators have devoted great amounts of time and energy to the topic recently, and since we know of no model currently operating within the state, we have reported on an out-of-state project which is relevant to many situations in Massachusetts. We do not necessarily advocate this particular program, or even the idea of an extended school year, to all school systems. We simply encourage administrators to examine all possibilities for acheiving greater effectiveness and efficiency in education.

Any Massachusetts school system wishing more information about the extended school year may contact C. Summer Allen, Department of Education, 182 Tremont St., Boston 02115, 617-727-5759.



VALLEY VIEW PUBLIC SCHOOLS, District #96, This is Area, Lociport, Illinois 60441 Capabitem lent: Henneth Hermansen appointed by: Tames Gove, Assistant openintendent Information and administrative contact: Tames Gove, 815-838-7981

In September, 1957, the voters of the rapidly growing Valley View Elementary School Sistrict in Lockport, Illinois (near Chicago) approved bond issues for two new elementary schools and brought the district to its statuatory debt limit. With the K-8 school population growing by 400-600 students per wear, it was plain that in a few years the schools would either have to go on permanent double sessions or find some other way of gaining more space without building more schools.

This was when the school board and administrators began considering the possibility of extending the school year. The "45-15" plan was worked out to suit local needs. The district's 7000 pupils (attending five elementary schools and one junior high) would be divided into four groups, with only three of the groups attending school at one time.

Each group would go to school for 45 school days and then have 15 school days of vacation. These segments of approximately 9 weeks and 3 weeks would continue year round, except that all pupils would be on vacation for 12 days in the summer (to allow maintenance work to be done on schools and buses.) All students would also have the traditional school holidays plus Christmas and Easter vacation off.

Valley View Assistant Superintendent James Gove points out that there are many ways of scheduling an extended school year, and any school system contemplating this move should work out a plan to suit its own needs—as "alley "iew did—rather than simply adopting someone else's plan.

Once the plan was worked out, the disemination efforts began through coffees, newspapers, radio, Dial-into-Education (a telephone answering service), and talks before various civic groups. This effort ran from August, 1968 until the extended school year plan went into operation on June 30, 1970.

Dr. Gove praises the cooperation Valley View received from the stat's Superintendent of Public Instruction and from the state legislature. Two laws had to be passed before the plan could go into effect: one law changing the average daily attendance formula for state aid to education (only 3/4 of the Valley View pupils would be attending school at one time), and legislation which would allow the district to operate year round.

This June the Valley View schools will be starting their second continuous year of operation, and Mr. Gove reports that there have been no serious objections and everything is running smoothly. "The whole thing is pretty much old hat to the community now, "he says. An effort is made to put not only children from the same family but children from the same neighborhood on vacation at the same time.

Community patterns beyond the schools are changing, too. Local churches are now offering "Vacation Bible School" all year. The recreation department is also offering year-round programs. Parents are planning more winter vacations and private tutorial services are springing up designed to help students having academic difficulties catch up during their three-week vacations.

Some teachers are working the same 45-15 schedule as the students they teach, taking the same vacations as their students. Their students will have the same teachers for each of the four 45-day segments of their school year. Other students may have as many as three different teachers per year, and for these students a three-teacher teaming situation has been worked out so none of the three teachers will be a complete stranger to them.

More than 60% of Valley View's teach-

ers have chosen to work more than the 180-days in the traditional school year and earn more money. All salaries are pro-rated on a day base.

One problem facing Valley View families is that their senior high school students attend schools in another district—one which utilizes the traditional school year. Due to overcrowding, the schools in this district are currently on double sessions. Valley View parents have successfully petitioned the district to allow all of their students to attend the same high school, and Mr. Gove feels in the near future this high school may be allowed to drop double

sessions and to on the same 12-month plan as Valley View.

According to Mr. Gove, economy is the purpose for keeping Valley View schools open all year. The plan has increased the classroom capacity by 1/3 (60 classrooms) without any additional capital expenditure. All students receive the 180 days of schooling required by Illinois law, and they do it without attending double sessions or overcrowded schools.

Date project operational: June 1970 No. of students involved: 7000 Dissemination materials available:
A kit of materials



105

### List of Area UNLOCK Consultants

Berkshire Area: Thomas White, State Department of Education Regional

Office, 7 North Street, Pitts Field 01201

413-499-0745 ((684-0996)\*

Bristol Area: E. Curtis Hall, State Department of Education

Regional Office, 3902 Cranberry Highway, East Wareham (mail, RFD #3, Buzzards Bay 02532) 617-295-4191

And the state of t

(295-2959)

(293-2935

Cape and Islands Area: William Sullivan, Bourne Grammar School, Bourne 02532

617-759-4234 (759-5672)

Essex Area: Leo Bisaillon. Director of Testing, Beverly Public

Schools, Beverly 01095 617-922-0316 (922-4118)

Franklin Area: Mrs. Harriette Enoch, 67 Memorial Drive, Amherst

01002 (413-253-2928)

Hampden Area: Dr. Robert Saisi, Westfield State College, Westfield

01085 413-568-3311 (203-928-3350)

Hampshire Area: Richard Krzanowski, Middle Annex, 9 Center Street,

Easthampton 01027 413-527-1510

Northern Middlesex Area: Mrs. Beverly Lydiard, 4 Fairway Road, Acton 01720

(617-263-7070)

Southern Middlesex Area: Joseph Hannigan, 70 Warren Road, Framingham 01701

(617-875-5025)

Plymouth Area: Miss Elizabeth Tormey, Bridgewater-Raynham Regional High

School, Mt. Prospect Street, Bridgewater 02324

617-697-6902 (586-4001)

Suffolk Area: Miss Barbara Kaufman, Bureau of Curriculum Innovation,

182 Tremont Street, Boston 02111 617-727-5790

Northern Worcester Area: Harold F. (Jack) Desmond, Junior High Lab School,

Fitchburg State College, Fitchburg 01420 617-343-6417

(342-5070)

Southern Worcester Area: Roger Charette, Tantasqua Regional High School, Main

Street, Sturbridge 01566 617-347-9301 (764-6917)

\*home telephone numbers listed in parenthesis



106 <sup>95</sup>

#### How to Multiply an Innovation

Q: Who may send in a promising practice?

A: Anyone--parent, student, teacher, principal, superintendent, news reporter, citizen, businessman--anyone.

Q: What kinds of projects are considered suitable for reporting?

- A: It may be a small classroom practice, the way the school is organized, a pilot project worthy of further attention, homegrown or national curriculum, almost anything. Projects may be in the schools or peripheral to the schools. If there is a question about suitability, feel free to contact the area UNLOCK consultant or the Bureau office first.
- Q: What criteria are used in making decisions about which projects to include?
- A: Criteria include evidence of imagination, a capacity to be transferred to another setting fairly easily, the serving of new or neglected audiences, interesting rearrangements or variations, the presence of new materials, and timeliness.

Q: How new must the idea be?

A: Usually we like a practice to have been in operation for at least six months. We have also included programs which have been in operation more than 10 years, and others which are no longer in operation. As long as an information contact person is available and the program is effective and worth replicating, we are interested.

Q: How much information must the reporter supply?

A: It is extremely helpful to have just a descriptive name of the program, a sentence or two about it, and the name of an information contact. This may be transmitted by letter or by the Kaleidoscope Lead Report form in this book. We do appreciate as much data as the reporter can gather beyond the basics.

Q: What is meant by "information contact" on the form?

A: This should be the person most in the middle, most knowledgeable about the idea. It is often a program director or teacher. The information contact should be able to answer in some detail questions from inquirers.

Q: What is meant by "administrative contact" on the form?

A: This should be the building administrator or the citywide staff person who has administrative responsibility for the program and who can answer questions from that perspective.

Q: Are federally-funded programs eligible?

A: Yes, if they meet the above criteria. We prefer a balance between locally-funded and federally-funded, however; and generally keep the latter to one-third or less, from a variety of acts and titles.

Q: Where should the information be sent?

A: It can come directly to the Bureau, to the area UNLOCK consultant, or to the local UNLOCK representative. The advantage of sending it to one of the UNLOCK agents is that he can add additional information to it before sending it on to the Bureau.

Q: What happens to the Lead Report once it is turned in?

A: A Bureau staff member further investigates the lead, contacting the name given. If the idea seems appropriate for Kaleidoscope, he makes sufficient inquiries by telephone or personal visit to gather information for a write-up. Then a draft is written and checked with those whose names are in the heading.



107

### Kaleidoscope Lead Report

Complete information is helpful, but do not let lack of some data prevent you from sending in a report. The essential things are a descriptive title, an information contact, and a couple of sentences defining the project.

Return completed form to your area or local UNLOCK representative, or to the Bureau of Curriculum Innovation, 182 Tremont Street, Boston 02111

Descriptive title					
Location (school/street address/town/zip)_					
Reported by					
Information contact(s)	Relation to project				
Address	Phone				
Administrative contact	Title				
Address	Phone				
Superintendent					
Date project operational	No. students involved				
Approximate yearly cost, personnel	materials				
Cost over and above regular budget	Source(s) of funds				
Dissemination materials availablefilms,					
Visiting policyif definite or unusual					

DESCRIPTION A concise statement of 100-300 words is very helpful and often sufficient for our purposes. If, however, you would like to add further information and attach descriptive materials, please do so. Photographs, illustrations, and diagrams are also welcome. In preparing a description, include such items as how and why the practice started; the age group and any special characteristics of its audience; specific examples of materials used and activities undertaken; some idea of physical arrangements and logistics; the project's strong points; the project's weak points; any critical problems and how they were solved; how it differs from previous practices; results/impact of program (anecdotes and/or formal evaulation).



Kaleidoscope Lead Report, continued Comment by local/area UNLOCK representatives: signed/date



### Grade Level Index

Numbers refer to items, not pages

Primary-Elementary:

2, 5, 8, 10, 11, 13, 19, 21, 23, 25, 26, 30, 34, 36, 42, 43, 44, 46, 47, 53, 55, 57, 61, 76, 80,81, 82, 84, 87, 88, 90, 91, 92, 93, 94, 95, 100, 102

Junior High:

3, 6, 15, 25, 26, 28, 35, 36,,37, 40, 45, 54, 62, 77, 80, 86, 88, 89, 90, 102

Senior High:

1, 4, 20, 29, 30, 32, 33, 34, 39, 48, 49, 51, 52, 56, 58, 59, 60, 68, 69, 71, 72, 73, 74, 75, 78, 96, 97

Secondary(Junior and Senior High School):

7, 12, 18, 27, 31, 50, 64, 67, 70, 79, 83, 85

K-12:

9, 1-, 16, 17, 22, 24, 38, 41, 63, 65, 66, 98, 99, 101



### City, Town, and Region Index

Numbers refer to items, not pages. Italicized numbers refer to projects in non-public schools.

Acton, 22, 44, 99 Lynnfield, 46 Marblehead, 43, 59 Acton-Boxborough Regional HS, 73 Masconomet Regional JHS, 6 Agawam, 10 McCann Vocational-Technical HS 72 Amherst, 14 Millis, 38 Amherst-Pelham Regional HS, 64 Milton, 84 Ashland, 3, 38 Mt. Everett Regional HS, 89 Athol, 77 Nashoba Valley Technical HS, 71 Attleboro, 54 Needham, 28, 49, 68, 76 Barre, 79 New Bedford, 91, 94 Blue Hills Regional Vocational HS, 75 Boston, 18, 25, 57 Newburyport, 27 Newton, 51, 58, 62 Braintree, 66 North Andover, 15 Brockton, 13 Northfield, 96 Brookline, 19. 32, 36, 98 Cambridge, 2, 11, 34, 56, 97 Norwood, 35 Chelmsford, 88 Otis, 82, 86 Quincy, 8 Chicopee, 12 Revere, 78 Cohasset, 7, 85 Concord, 52, 60,100 Rockland, 63, 80 Rowley, 26 Conway, 53 Roxbury, 23, 31 Easthampton, 45 Southwick, 70 Everett, 90 Fitchburg, 40, 69 Spencer, 92 Framingham, 33, 39, 42 Springfield, 81, 87 Gloucester, 48 Stoughton, 5 Hamilton-Wenham Regional HS, 20 Sudbury, 21 Swansea, 30 Hingham, 74 Tantasqua Regional HS, 50 Holliston, 38, 61 Waltham, 47, 93 Hyde Park, 29 Ware, 67 Jamaica Plain, 37 Weston, 4 Lawrence, 41 Westwood, 17 Lexington, 1 Winchendon, 83 Lincoln, 55 Winchester, 9 Littleton, 95 Worcester, 16, 24, 65, Lockport, Illinois, 102



### Kaleidoscope Comment

1.	a. Administrative and Structural Variations b. Supporting Innovation/Professional Development c. Parents/Communication d. Student Involvement e. Children with Special Needs f. Guidance/Human Relations g. Humanities/Art/English/Foreign Languages/Media/Music h. Health/Physical Education i. Vocational Education j. Science/Environment/Mathematics k. Social Studies l. Reading/Elementary Language Arts Experimenting with the Total Program
2.	The programs of most interest/value to me were #
3.	I would like to see more information about programs dealing with:
4.	This publication is (useful/not useful) to me because:
5.	This publication could be improved by (specific recommendations):
6. (ac	In following up the following program(s), I found the information was curate/not accurate) in describing it:
7.	In order to increase visiting of such programs, I would be most likely to go if:  a. There was a week set aside when all Kaleidoscope programs would be specifically open to the public.  b. The program had additional information prepared beyond the Kaleidoscope description.  c. I knew there was someone on the rogram's staff specifically designated to assist visitors.  d. The program had a regular weekly or monthly day throughout the year when it welcomed visitors.  Answer more than one of the above if appropriate.
8.	About the way Kaleidoscope is written:  a. Amount of information given: too little, sufficient, too much  b. Readability: too difficult, about right, too easy  c. Variety: too many different things, good balance, not enough  d. Format: prefer double column (like K3) prefer single column (K1)
9.	General remarks:
ERI Full Text Provided b	business address city position