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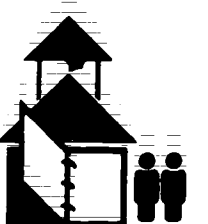
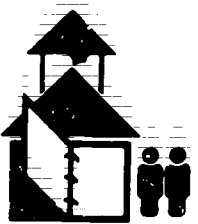
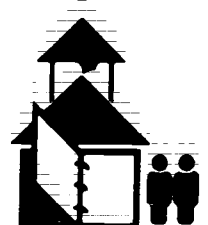
ABSTRACT

This fourth and final guide in a series of volumes addresses parents who desire assistance in selecting the appropriate school for their child. The guide provides narratives and "real life" descriptions of actual occurrences in schools that advertise themselves as emphasizing a particular style or philosophy of teaching or curricular emphasis. Daily activities are sketched in 10 schools in 6 school districts in Massachusetts and New York. Section 2 of the guide describes fundamental, "back-to-basics" schools: Burncoat Preparatory Magnet School, Worcester, Massachusetts; and Bridge Alternative Concept School, Community School District Four, East Harlem, New York City. Schools described as using a "continuous progress, non-graded, individually guided" approach to school organization and grouping profiled in section 3 are Hernandez Two-Way Bilingual Magnet School, Boston, Massachusetts, and Mill Swan Communications Skills Magnet School, Worcester, Massachusetts. The Montessori developmental or "open" education type of school is modeled in section 4 by Bennett Park Montessori Center, Buffalo, New York; Graham and Parks Alternative Public School, Cambridge, Massachusetts; and City Magnet School, Lowell, Massachusetts. Described in section 5, "Schools with Curricular Specializations," are Arts Magnet School, Lowell, Massachusetts and Isaac Newton School for Science and Math, New York City. The final section briefly discusses degrees of parental involvement that can accompany any of the options. (CJH)

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A Consumer's Guide to Schools of Choice

... for Parents and Other
Educators



Evans Clinchy

Institute for Responsive Education

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**A CONSUMER'S GUIDE TO SCHOOLS OF CHOICE
For Parents And Other Educators**

by

Evans Clinchy

January 1987

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"In a democracy, you can't just tell people what's good for them and then impose it on them whether they want it or not. Yet that's what we have always done in public education. That's why so many parents want to take their children out of the public schools and — using tuition tax credits or vouchers — put them in private or parochial schools. That is often the only way that parents can choose the kind of education their children will receive.

"We are all individuals. We learn and work in different ways. If you give students, teachers and principals a chance to learn and work in an environment they prefer — a place they have chosen of their own free will, where they feel comfortable and respected — we think they will direct their energies towards a common goal: excellence."

— George Tsapatsaris, Project
Director for Magnet Schools,
Lowell Public Schools, Lowell, MA

"I think a good modern school system ought to provide as many options as possible. In that sense, I think every school ought to compete with every other school. One of the major problems we have in the public schools is that they all point to the almighty norm, with the result that they offer a dull and uninteresting education for children. What we need is to provide enough options — different kinds of good educational programs — to satisfy the total demand of parents and teachers and students."

— Eugene T. Reville,
Superintendent of Schools,
Buffalo Public Schools, Buffalo, NY

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Other handbooks produced by this project were authored by Laura Ferguson and Ross Zerchykov. Owen Heleen, Publications Director, edited the series of publications; Mary Westropp provided research assistance; and Catherine Baker and Betsy Bigelow provided word processing and secretarial support.

FOREWORD

An Introduction to the Series "Parent Choice and the Public Schools"

by Ross Zerchykov,

Research Director, Institute for Responsive Education

What determines where children in America go to school? In the vast majority of cases, it is where they and their parents live. But, amidst all the current debate about excellence in education, we never hear of an educational reason why public school children are most often assigned to schools on the basis of place of residence. This system has serious ramifications for equality in our society.

In this and the other four volumes in our series "Parent Choice and the Public Schools," we examine the question: Why must where a family can afford to buy or rent housing be the determining factor in where a child goes to school?

We hope this series of publications will be helpful to all those -- parents and taxpayers, school leaders and government officials -- who are beginning to question this connection between education and real estate.

One obvious explanation for the connection (other than inertia) is cost: assignment by residency is relatively simple and holds down administrative and transportation costs, thereby freeing up resources for curriculum and instruction. Arguments

against parent choice as an alternative assignment model often also invoke concern that parent choice could lead to racial resegregation and/or exacerbate socioeconomic segregation. Furthermore, some say increased choice would only be exercised by the more informed, active and educationally ambitious of parents, thereby leading to some schools becoming hotbeds of parent support and involvement, while others become pockets of apathy.

Opening up choice among schools, others argue, would invigorate all schools through competition. Indifferent schools would no longer attract parents and, as in the business world, would go out of business to be replaced by other, more "responsive" schools.

Such claims, when repeated often enough, can begin to sound like self-evident truths. The first of our series of publications, Parent Choice: A Digest of the Research, is designed to shed some light on the costs and benefits of different kinds of parent choice and provide summary answers to the most frequently asked questions about parent choice, based on an analysis of the research and evaluation studies of various parent choice initiatives in the United States, including voucher experiments, magnet schools, public schools of choice and open enrollment programs. The answers, as always, are not definitive or tidy, and some questions can never be answered within the limits of experimentation in education (e.g., what would be the impact of a totally free market in education? -- would consumer sovereignty and the resulting competition equalize opportunities,

and would the resulting competition lead to innovation and excellence? Or, would suppliers in the educational market, like suppliers in all markets, strive to restrict competition?)

Nonetheless, the research evidence is instructive and tells us enough to sift through and put aside some of the claims and counter-claims about choice.

One such claim that could be used to justify the current system of assigning pupils to schools on the basis of residence is that parents don't want anything else. They like the "neighborhood school," as witnessed by community opposition to school closings and "forced busing." And, some contend, choice is irrelevant anyway since, basically, all parents want the same thing: good schools and a good education for their children.

Contrary evidence, however, comes from data in the Gallup Poll on education showing that a significant majority of parents want more choice. (Phi Delta Kappan, September 1986)

But, for local citizens and school leaders, nationally aggregated opinions are less important than local sentiment. One way to find out if local parents want more choice is to simply ask them. A method for doing so, for identifying whether parents want more choice, under what conditions, and what kinds of education they would choose is described in the second volume in our series, Planning for Parent Choice, which offers a step-by-step guide to surveying parents, and provides a method and a survey instrument that has been used over a period of five years in four Massachusetts urban school districts.

There is research evidence, especially from the intensive evaluation of 1970s voucher experiments in Alum Rock, California and other locations, which does show that there is cause for the concern that not all groups of parents participate equally in choice programs, that, in fact, more informed (and affluent) parents are more likely to participate in, and hence benefit from, increased opportunities for parent choice. In those cases, the "information deficits" suffered by parents were attributed to schools disseminating information only in the form of print material in the English language. These dissemination strategies may have been appropriate for middle-class, white-collar settings but were not effective for poor or linguistic minority parents. Current practices, happily, are more sensitive to the different ways that information reaches different kinds of parent populations.

The third volume in this series is a Parent Information Strategies providing short profiles, with nuts- and-bolts kind of information, about the range of exemplary parent information strategies from 23 school districts in 13 states across the nation.

Our fourth volume, A Consumer's Guide to Schools of Choice addresses parents who are in the enviable position of being able to choose but could use help in making the right fit between their aspirations and values and a particular school. This guide is intended to give such parents real-life descriptions of what actually goes on in schools of choice. What is different in

schools that advertise themselves as having an emphasis on a particular style or philosophy of teaching -- i.e., "basic skills" or "classical education" or "child-centered, developmental approach" -- or a particular curricular emphasis, i.e., "the arts" or "science and technology?" The Consumer's Guide elaborates the assumptions about how children learn that lie behind such labels and provides a checklist that enables parents to decide whether their aspirations for and knowledge about their children will match up with the labels that diversified public schools of choice use in describing themselves. The Consumer's Guide sketches daily activities in ten schools in six different school districts in Massachusetts and New York.

Such illustrations belie the general assumption that all parents want the same kind of "good education," an assumption that can and has been used as an argument against providing expanded opportunities for parent choice. The vignettes are all taken from public schools of choice, many of which have long waiting lists, indicating that many parents have a desire for more options than are currently available.

We don't pretend to have all the answers to the puzzle facing local school decision-makers -- school and government officials and parents and citizens -- as they consider ways to respond to the growing desire for more choice of some kind. Neither do we believe that parent choice will solve all of the educational problems facing our nation today. Rather, we prefer

to remain open-minded and offer this publication and its companion volumes to other open-minded readers -- government officials (at all levels), school administrators, and parents and taxpayers -- who have questioned whether we should assign all students to the same kinds of schools on the basis of residency and not according to parental aspirations or children's learning styles.

IN THE HOUSE OF EXCELLENCE, THERE ARE MANY MANSIONS:
HOW TO USE THIS GUIDE

The vast majority of public schools in this country tend to be quite similiar and to have a basically "traditional" approach to the education of children. Over the past decade or so, we have seen a growing movement to provide parents with a range of different kinds of public schools from which they may choose a school that they feel will provide the particular kind of schooling they want for their children. In a sense, all of these parents have chosen different, individual meanings for educational "excellence."

These "different kinds of schools" have come about largely as a result of the "alternative" school movement that began in the 1960's and, more recently, as a result of the creation of over a thousand "magnet" schools in response to the need to desegregate our larger urban school systems.

Not Necessarily a New Idea

In one sense, the idea that a public school system should provide a range of different kinds of schools is not new. We have always known that all children are individuals. Some children are good at some subjects and some kinds of educational activities and not so talented at others.

Some children enjoy and do well in a very traditional, highly organized school environment. Other children find such an environment confining and learn better in an environment that gives them more control over what and how they are going to learn. Some children learn their basic skills and progress in other subjects very quickly while other children take a little more time to learn the same things, even though in the end they learn them just as well as the "quicker" children.

We have also long been aware of the fact that parents have differing ideas about how they want their children educated. Many parents want their children to have a very traditional, "old-fashioned" education because they believe that is what is best for their children and therefore what public schooling should be. Other parents believe that schooling can and should provide other kinds of experiences for their children, and they therefore want the opportunity to send their children to less traditional schools.

What It All Means

What all this appears to mean is that there is no single kind of public school, no single kind of curriculum or a single, standardized definition of "educational excellence" that is going to be equally satisfying to the wide diversity of parents and students served by our public schools or to the wide diversity of professional educators who work in those schools.

While all of the possible "different kinds of schools" aim to teach children the basic skills -- the three Rs of reading, 'riting and 'rithmetic -- they have different ways of organizing themselves, different ways of going about the task of teaching, differing ideas about how children learn and differing ideas about what "going to school" should be all about.

Indeed, it can be said that no school, existing or newly created, can operate without having made decisions about all these things. Although the people who work in any individual public school may never have carefully and consciously thought about each of the areas and made a set of deliberate decisions concerning each, the way they organize and operate their school will reflect the decisions they have perhaps unconsciously made.

Thus every school, public or private, has an educational philosophy, a particular view of how children should go about the task of learning, a fairly clear idea of what teachers should teach and children should learn (the curriculum the school offers) and a set of rules and regulations by which the school operates, including how the classes will be organized, how children will be grouped into those classes and what the disciplinary code will be.

But What Do We Mean By "Different Kinds of Schools?"

If one looks at the wide variety of alternative and magnet schools that have been created in school systems around the country, the scene can be a bit bewildering. These schools at first glance seem to come in all shapes, sizes and colors.

Closer study, however, suggests that these schools tend to fall into three basic and, for the most part, mutually exclusive categories. Let's call these three basic "options" traditional or "back-to-basics" schools, "continuous progress" schools, and developmental or "open" education schools. Each of these options has a distinctive educational philosophy, its own view of what children should learn, a distinctive conception of how children can best go about the task of learning and a particular way in which the school goes about organizing and operating itself.

Thus The Need for a Bit of Guidance

Given this diversity of magnet and this "consumer's guide's" aim is to provide descriptions of at least these three major types of "different kinds of schools" -- all of them magnet or alternative schools of choice -- that already exist in the public school systems. Our goal is to assist parents in selecting the kind of school they would like to have for their children -- or the different kinds of schools they would like each of their children to have.

We should also add here that the nine schools described in this guide were not selected because they are necessarily the "best" schools of their type but because they offer a fair representation of their particular approach to schooling.

Ways In Which Schools of Choice Will Probably Not Differ

Having said all of the above about how schools can and should differ, we will now say a few words about the elements all public schools should share.

1. All such schools, being public schools, must be desegregated and should therefore have student bodies that roughly represent the total school population of any given system, i.e., they should be open to and serve students of all racial and ethnic groups and all income and achievement levels. Under a system of parent choice, all school admissions and student assignment policies should be so designed that such student integration is guaranteed.
2. All schools will teach basic skills -- reading, writing, mathematics -- and probably most other normal curricular subject matter but may not teach them in a traditional ways. Students in all schools of choice will probably have to pass tests to insure minimum standards of basic skills competency.
3. All schools of choice will, most likely, have to conform also to some general curricular requirements or "standards" set either by the state and/or the local school board -- such as all students having a basic knowledge of the U.S. Constitution and how a democratic society works. Any such requirements should be kept to a minimum so as not to interfere with the ability of individual schools of choice to establish their own educational philosophies and their

own curricula and to practice their own approaches to teaching and learning.

Two Ways Parents Can Use This Guide

Parents -- and other interested parties -- can use this guide in at least two ways.

The first is to simply read each of the descriptions, including the parent checklist, and decide which of the options best fits the parent's desires for his or her children.

The second way is to look first at the section in each of the descriptions titled "The Kind of Student Best Suited for This Kind of School" and select the description that best fits the child. Or, since children in the same family are often quite different from each other and may have different educational needs, parents might wish to select different schools for each of their children. By then reading the full description of that particular kind of school, a parent will get a general idea of the kind of school he or she could choose for each of those children.

In the following three sections of the guide, we will attempt to describe the ways in which the three distinct and, by and large, incompatible options differ from one another, how each of them envisions what the purposes of public education are and how children learn best, what the curriculum should be, and how schools should be organized and operated.

In the final section, we briefly discuss and give examples of the different degrees of parent involvement that any of the options can adopt and practice. Parent involvement can range from consultation to shared governance of the day-to-day operations of the school.

2.

Option I Schools: Fundamental, "Back-to Basics"

Models: Nathan Hale Magnet School, Boston, MA

Burncoat Preparatory Magnet School, Worcester, MA

Bridge Alternative Concept School, Community School

District Four, East Harlem, New York City

It is 8:45 a.m. on a cold but sunny day in the asphalt covered yard of the Nathan Hale Magnet School in the Roxbury section of Boston. The school, an ancient solid building built in 1909, sits like a medieval castle on its hill in Roxbury's Fort Hill neighborhood.

The school's children -- almost all 186 of them -- are getting off their buses and milling around in the school yard, greeting friends and classmates. There seems -- mysteriously -- to be no pushing or shoving. There are a few adults -- a teacher or two and an aide -- around, but they seem to have little to do.

At 9 a.m., the rear door to the school opens, and the children, guided only by a soft word or two from the adults, line up in rows according to their classes. They then move quietly into the building's basement food service area (the school has no cafeteria and no gym), pick up their breakfast trays and, still in quiet and orderly lines, move upstairs to their classrooms. There they eat their breakfasts (and later their hot lunches) and begin the day's classes.

If this routine of school children lining up in rows and moving through the halls in a quiet, orderly way strikes anyone as a bit "old-fashioned," the people at the Nathan Hale would not be surprised. A very traditional "back to basics" school is the kind of school they run and want to run, and, they say, the kind of school the parents who have chosen it want their children to be in.

The classes at the Hale are age-graded, that is, all five year olds are in the kindergarten, all six year olds to first grade and so on. Each of these classes operates within the four walls of a traditional, "self-contained" classroom. By and large, each teacher handles the teaching of most of the traditional school subjects. According to Pasquale "Pat" Lochiatto, the school's principal for the past seven years, the classes are very much run by the teachers. Which, he says, is as it should be in a school of this type.

The school's magnet theme or "special attractiveness" is called "Academics Plus," by which the school means that it offers an educational program that concentrates on the basic skills of reading, writing and mathematics "plus" enrichment in the arts, in the use of computers and, of course, social studies and science. As a result of additional state funding as a desegregated magnet school and its partnership with Wheelock College, the school offers a Kodaly music program, a creative writing course and special programs at the Museum of Fine Arts and the Science Museum. The school is seen by most parents and, Lochiatto says, really is a "traditional" or "back to basics" magnet.

What brought this most strikingly to my attention on the first day of a two-day visit (in addition to the lining up in rows whenever movement was called for), was the extraordinary atmosphere of calm and order that pervades the school. During the hours when children were supposed to be in their self-

contained classrooms being taught, they were in their classrooms being taught. No children were wandering aimlessly through the corridors and, when they were in the halls moving from one school activity to another, there was no horsing around.

And yet it is perfectly clear that this is no jail. In the course of two days at the school, I never heard an adult raise his or her voice to a child -- not in a class, not in the hallways. Whatever the school's "discipline code" may or may not be, it was clear to me that every child and every adult in the school knew exactly how he or she was supposed to behave. And it was no big deal. Such "good" behavior seemed to be simply the natural condition of things at the school.

Indeed, Lochiatto informed me that in the seven years he has been principal of the school he has never suspended any pupil for a single day. "Here," he said, "the teachers and students work things out on their own. Everyone learns to resolve problems as they arise. Orderliness is just the ethos of the school. The children pick it as soon as they get here. The teachers expect it, all of the children expect it -- particularly the older children -- and it just happens. I almost never get involved in having to solve a discipline problem."

* * *

On the wall outside of Lochiatto's office is a very large bulletin board with the words "Academic Achievers, December -- February" at the top. Beneath this title there are four categories, each with a list of student names on it. The top list

is headed "Honor Roll" and has 48 names on it. (In order to get on the Honor Roll a student must have an "A" or a "B" in conduct, effort and all school subjects). The next category is "Merit Award" and has 16 names on it. (In order to win a Merit Award, a student must have an "A" or a "B" in conduct, effort, and all major subjects). The third category is "School Spirit" and has 18 names on it. (In order to qualify for a School Spirit award, a student must show excellence in conduct, effort, citizenship traits and work habits). The fourth category is "Perfect Attendance" and has 39 names on it.

* * *

Up on the school's second floor, the 28 children assigned to Jim Sullivan's fifth grade class are coming into their classroom, in their usual quiet line. As they enter the classroom with its desks all lined up in rows, each student quietly takes his or her assigned seat in his or her proper row, all still with their coats on.

After everyone is seated, Sullivan makes a barely perceptible motion with his right hand and utters a barely audible "First row." At once, the children in the row nearest the cloakroom rise and put their coats away. When they are finished, the next row does the same until all coats are hung up.

Sullivan begins his class by assigning a girl to hand out pieces of yellow paper to everyone while he asks the class to get out their rulers. "Now," he says to the whole class, "how many parts are there to a fraction?" He goes around the class,

selecting individual children to give an answer. "Four." Next child. "Two." Next child. "Twelve." Sullivan goes to the chalkboard and writes on it the word "fraction."

The class -- all 28 of them -- sit in rapt silence, hanging on his every word except when, in answer to one of his questions, some of them wildly wave their arms volunteering to answer.

"What's a word," he says, "that sounds like fraction -- for instance, when you go the hospital?"

"Fracture," says one child.

"And what does fracture mean?"

"It means you've broken something."

"Right," says Sullivan." He then goes on to explain that a fraction is also something broken down into different parts. There are two kinds of fractions, he says, putting the names on the board, "common fractions" and "decimal fractions." "I'm going to give you some definitions, now," he says, "and I want you to write them on your paper."

He goes to the board again and writes "A common fraction is a part of a whole." He then illustrates this with a story of a child with a candy bar who wants to share it equally with a friend. Where would the child have to "fracture" the bar so that each would have equal parts?"

"In the middle," says one student.

"And how much would each of them have then?," he asks.

"One half," says the student he calls upon.

"Right," says Sullivan, "and suppose a third kid comes along and they want to share the candy bar three ways and all have equal amounts? Tamara?"

"Break it into three parts," says Tamara.

"Right," says Sullivan, "and then how much would each have? Kevin?"

"One third," says Kevin.

"Good," says Sullivan.

Sullivan then goes into an examination of the parts of a fraction -- numerator, denominator and fraction line -- always eliciting the answer from one of the children.

At the end of the lesson on fractions, Sullivan winds it up by quickly going around the room asking review questions -- what's a fraction? how many parts? what's the upper part? what's the lower part? what's in the middle? -- calling on various children for answers and quickening his pace as he goes. As the questions come faster, the children get more excited and more eager to answer.

Sullivan brings the lesson to an abrupt end and has the children move all of the desks out of the way. They then line up in rows and do exercises, led by one of the boys -- touching their toes, arms up, arms down, and so on -- this being part of the school's physical education program, since the school lacks a gym. The exercises are followed by a rapid game of "Simon Says," again led by several of the students.

BURNCOAT PREPARATORY MAGNET SCHOOL
WORCESTER, MA

"Burncoat Prep", as the school is known throughout the city of Worcester, is a magnet school housing some 330 children from kindergarten through grade 6. It was created in 1983 as one of the school system's first magnet schools (there are now ten, with more being developed each year).

Like the Hale in Boston, Burncoat is a traditional, back to basics school that emphasizes the learning of basic skills and the traditional academic subjects. At one point in the planning of Burncoat, the parents involved in the planning wanted the school to be called "Burncoat Preparatory Academy," to stress the traditional nature of the school and make it virtually resemble an old-fashioned private school. The system administrators, however, thought that this was carrying things a bit far and dropped the word "academy."

Burncoat, like Hale, organizes its students and its classes primarily by age -- all or most fourth graders are in a fourth grade class with one teacher who teaches them all of the major academic subjects (there are specialist teachers for such subjects as art and music).

But within those age-graded classes, Burncoat takes a slightly different tack from the one practiced at Hale. At Hale, all of the children in the class will for the most part be studying the same lessons and learning the same material all together as a whole class. In a typical class at Burncoat, on the other hand, the children will be divided up into groups

depending upon their achievement levels. While the teacher works with one group of children, giving them a lesson appropriate to their achievement level, the other two groups of children will be doing assigned work in their seats.

* * *

In Jane Johnson's fourth grade class at 9 a.m. one morning, the 23 children are sitting at their desks, which are lined up in rows facing the chalkboard in the front of the room. Every desk has a child's name on it.

The room itself is crammed with a vast array of books, wall charts, a fish tank, a TV set, a stack of baskets in the back of the room (one for each child and containing that child's text and workbooks) and, of all things, an electric pencil sharpener.

On one wall is a large chart headed "Classroom Standards" which reads:

1. We respect the rights of others.
2. We laugh with people, not at people.
3. We have no voice when someone else is talking.
4. We have a quiet voice during work periods.
5. We have a loud voice on the playground only.
6. We follow directions.
7. We stay in our seats.
8. We raise our hands.
9. We keep hands, feet and objects to ourselves.
10. We do not tease or call others names.
11. We always try to finish our work on time.

12. We bring our pencils, books and homework to class."

It turns out that Johnson has divided her class into three main groups -- higher, middle and lower. The two black students in the lower group who are receiving Chapter 1 remedial services now get up and leave the room for their session with the Chapter 1 teacher. One student, who has just moved to Burncoat from another school, has been assigned to the other fourth grade class for reading, since it has a group that is operating on essentially a third grade level.

Johnson now sets up the higher level group of 12 students for the lesson they will be doing on their own. Although this is the class' reading period, the lesson they are working on involves the metric system. It is an example, Johnson tells me, of how the school tries to integrate its teaching of the various academic subjects.

"In this lesson," Johnson tells the group, "you'll be working on grams and pounds and liters and quarts. Now, these are thinking questions. You have to read each one carefully and look at the chart on page 17 and then think about what the right answer might be. For instance, what would weigh 50 grams?"

A child says, "A frankfurter!"

"That's right," says Johnson. "And 150 grams?"

"A half pound of cheese!"

"Right. And how many ounces are there in the carton of milk you get with lunch?" This stumps the class for a minute.

"Well," says Johnson, that would be about 4 ounces or a half pint. How many litres would that be?"

"One half litre?" asks one of the children.

"Yes, that's right."

So the group all settles down to work on filling in the blanks in their workbook.

Johnson now turns her attention to the middle group of seven children who are sitting at the desks in the front of the room. This group will be working on another lesson that integrates reading, language arts, science and mathematics.

"We're going to be talking about the origin of numbers," she tells the group, "and about mathematics, which is the study of numbers."

She proceeds to tell them about the early astronomers used numbers to calculate the movements of the sun, moon and planets, how the Chinese developed the abacus and how all this led to mathematics and computers. She and the class together then read from their textbook Carl Sandburg's poem called "Arithmetic" with its first line, "Arithmetic is numbers that fly like pigeons out of your head."

During this lesson with the middle group, the first group are for the most part working quietly at their desks. Occasionally one of them gets up and gets something out of his or her basket in the back of the room. Sometimes there is a quiet conference between one or two students. Since they can clearly hear everything that Johnson and the middle group are saying in

the front of the room, one of their main tasks is to ignore all that and keep going on their own work. Although some of them appear to be paying some attention to the action up front, for the most part they seem to be able to attend to what they are supposed to be doing.

BRIDGE SCHOOL
COMMUNITY SCHOOL DISTRICT FOUR, EAST HARLEM
NEW YORK CITY

The view from the fourth floor of P.S. 101 in the East Harlem section of New York City doesn't exactly inspire the soul.

Across the street from the school there is a deserted lot full of weeds and broken glass. On each side of the empty lot stand burned out, abandoned tenement buildings. As I stand here, a young boy -- he looks to be about 10 or 11 years old -- emerges from a boarded-up door on the third floor of the building on my right and, looking furtively about, makes his way down a fire escape and into the street.

Michael Friedman, the tall, energetic director of the Bridge School which inhabits the fourth floor of P.S. 101, is standing beside me and suggests that the youngster has just made a drug deal. The building on the left, says Friedman, is a shooting gallery.

Drugs are only one of the problems faced every day by the people of East Harlem, home of New York City's Community School District Four. Thirteen thousand kindergarten through grade 9 children, their parents and teachers -- inhabit District Four's 80 schools. The district is predominantly made up of black and Hispanic children (roughly 90%). Many of the latter are recent immigrants speaking little or no English. Many -- if not most -- of the students in the district come from single parent homes. Almost every child is poor enough to qualify for a free lunch, and many are from welfare families.

In sociological terms, then, most of the children in the district would fall within the definition of the great American "underclass," that segment of the population trapped in the classic cycle of poverty, dropping out of school, functional illiteracy, welfare -- perennially unemployed and forever unemployable. For many of these children, the normal predictions are for a life of welfare dependence, teenage pregnancy, drugs and crime. In short, a permanent drag on the society as a whole.

And, Friedman says, those predictions will never come to pass for the 280 grade 6 through grade 9 children entrusted to his care each year.

"What we want to do here -- what we do do, I believe -- is to help these children become good, honest, decent citizens," says Friedman. "We want them to become decent people, which is what the parents who send their children here want them to be."

Friedman and the staff at Bridge are openly and unabashedly in the business of "character building" or, as the school's articulated educational philosophy puts it, "to provide a form of value education that will enable children to make moral or judgmental decisions based on what they have learned."

And how, precisely, does the school go about "building character"?

"Well," says Friedman. "in the first place, we run a very strict, old-fashioned school but also, I think, a very humanized one. We have a very traditional curriculum -- reading, social studies, English, math, science, health and phys. ed., reading/

literature and art. But every student also takes courses in consumer education, law, career education, drug and alcohol abuse, sex education, minority studies and communication arts. I call this a 'no frills' school, and that's a beginning on character building all by itself.

"And just as importantly, we are a very small school by ordinary junior high standards. Everyone in this school knows everyone else. The teachers know every kid by his or her first name. No student gets lost in the crowd at this school, as all too often happens in large junior highs. And this makes it much more possible to teach solid citizenship, respect for others and general good behavior.

"And most importantly, I think," says Friedman, "we try to build character first and foremost by example. We have a very clear set of rules that everyone in the school follows. And by 'everyone' I mean just that -- students, all staff members and myself.

"For instance, my assistant director and I stand in the hallway every morning when the kids come to school and say 'good morning' to every student using his or her first name. We expect every student to say 'good morning' back, and they do. And the teachers all behave the same way.

"We expect simple, common courtesy from everybody. If a student steps out of line with another student or a teacher, we expect the student to apologize. And if a teacher blows his cool

in class, then we expect the teacher to apologize to the whole class.

"We also have a dress code of sorts for both teachers and students. All men teachers, for instance, must wear shirts and ties. We hold a school assembly every two weeks, and all of the boys have to wear a white shirt and a tie and all of the girls have to wear a white blouse and a skirt.

"We have a student handbook here that's nine pages long. It spells out in considerable detail all of the school's rules and regulations for students -- attendance, punctuality, being prepared each day for school with two pencils, one ballpoint pen, one looseleaf notebook, covered textbooks for each class and all assigned homework done. We have general classroom behavior rules, including our expectation that all students will conduct themselves like ladies and gentlemen at all times. Fighting, cursing, yelling or instigating fights are simply not tolerated.

"But -- getting back to the building character by example business -- we also have a staff handbook that spells out how all of us staff members are expected to behave. We always try to treat every child as a distinct human being worthy of respect, and if we don't, then we're not doing our job. We never ask the kids to do anything we don't do ourselves.

"In order to get into this school," Friedman continues, "you have to want to be here and you have to agree to abide by all of the rules. For instance, every student and parent must sign an

agreement with us that they have read the student handbook and understand and agree to all of the rules. Parents have to agree to check all homework assignments and make sure that the student is ready to come to school each day.

"What we are trying to do is to provide a quality education for these kids. We try to get across to them what the pay-offs are for hard work and good behavior. In the first place this means getting into a good high school -- one of the city's specialized high schools -- like Bronx High School of Science or Stuyvesant -- rather than the 'zoned' or neighborhood high schools. In the second place it can mean getting into college and ending up with a good, high paying job and a better life. And this happens all the time around here. Our kids do get into good high schools and many of our graduates are now in very good colleges.

"We want them to know that the future doesn't have to be what it looks like on the outside, that they can make a difference in their own lives. We want to instill a sense of personal pride and dignity in every child who comes here, a sense of self-responsibility for what they do and become."

* * *

In Eric Stofsky's 7th and 8th grade social studies and law class, there are some 30 students sitting at desks all facing the front of the room. This is a double period class and thus lasts one hour and a half.

An outline of the lesson for the day is written on the chalkboard up front (all classes in the school start with the lesson written out in this fashion):

"Aim: to examine the First Amendment to the Constitution and its importance to a democratic society.

1. Define a law.
2. How are rules and penalties made in a democratic society?
3. What is the purpose of the corrections system?
4. List and describe three purposes of the law.
5. What is the main feature of common law?"

Stofsky calls the class to order and refuses to begin the lesson until everyone is quiet and paying attention. After a few moments of squirming, the students settle into their chairs. He begins the lesson with a question:

"What do you think of this school? Raise your hand and give me your opinion." Half the hands in the class go up.

"It's unfair that at lunch time we can't go around the school wherever we want!"

"Why aren't there more lockers so everyone can have one?"

"We need more time at lunch so we can go outside!" Much clapping in support of this notion.

"On a scale of one to ten this is a four!"

"Okay," says Stofsky. "Now I'm going to ask you another question. Or rather I'm going to make a statement of an opinion. It's not necessarily my opinion, but it's an opinion. Ronald

Reagan is the best president we've ever had in the United States."

This is met by a chorus of groans.

"No! He's not good to poor people!"

"He only wants weapons and war! I hate him!"

"Okay," says Stofsky. "What about Reagan's priorities. Do you know what a 'priority' is? No? Well, if you choose between going to a rock concert and doing your homework, that means that going to the concert is your priority over homework. So what about Reagan's priorities?"

"He's not a Democrat!"

"He's prejudiced against black people!"

"Suppose I make the statement 'President Reagan is for spending money on the military rather than on housing for the poor.' Can I say that?"

"Sure you can say that!"

"Why can I say that?"

"Because we have freedom of speech!"

"That's right," says Stofsky. "I can say that and you can criticize this school because of the First Amendment to the Constitution which guarantees freedom of speech, freedom of the press and freedom of religion. There's also a fourth freedom the First Amendment guarantees. Does anyone know what it is?"

No one seems to know.

"Okay, suppose Jesse Jackson wants to hold a meeting to criticize Ronald Reagan. Can he do that?"

"Sure!"

"Why?"

"Because he can!"

"No, Jesse Jackson can hold a meeting and people can come to it because the First Amendment guarantees that people have the right to assemble peaceably."

Stofsky then goes on to ask if the rights guaranteed in the First Amendment are "absolute -- which means no exceptions." The class isn't sure. "Can we say anything we want any time we want to?"

Stofsky then tells them about Supreme Court Justice Oliver Wendell Holmes and his statement that free speech has to be limited in some instances. "For instance," Stofsky says, "you can't cry 'Fire!' in a crowded theater because it might cause a panic and people would be killed."

"In fact," says Stofsky, "you have a right to criticize Ronald Reagan but you don't have the right to get up in front of a crowd of people and say 'Let's kill Ronald Reagan' or 'Let's overthrow the government by force.'" As I look around the class, I'm not sure that all of the students agree with that one.

The class moves on to a discussion of the right to vote and the need for people to know what is going in the government they are voting for and what the candidates they are voting for believe and are doing, and thus into a discussion of freedom of the press.

Stofsky ends this part of class with a discussion of "the free marketplace of ideas" and how the First Amendment is designed to ensure that there are a lot of ideas around and that people will be allowed to express them and choose the ones they believe are best.

Now, halfway through the hour and a half, students are getting a bit restless, so Stofsky calls a five minute break. The students get up and stretch and mill about, making considerable noise.

Stofsky begins the second half of the class with a discussion about "What would happen if we didn't have the First Amendment and other laws? What would we have?"

"Chaos!" says one girl.

"Right," says Stofsky, "and what's the opposite of chaos?"

"Order!"

"Right. So what we have here is a conflict between the need for the freedoms guaranteed by laws such as the First Amendment and the need for some kind of order, some kind of balance between the two. And that's what courts are for."

The class then goes on to discuss this topic, but the students are now getting really restless. Stofsky has kept them at it for well over an hour now, and the wear and tear is beginning to show.

Stofsky now begins to lighten the discourse, asking, "Do we have free speech here in this school? Does the First Amendment apply here in this class, for instance?"

There are several cries of "No!"

"Well, in a sense that's true," says Stofsky. "I guess that when you're in class you're not a citizen of the United States, you're a student in school."

There are loud hoots of derision and cries of "Why not?" from the class as it begins to break up and leave.

As the class is going out, one of the students comes over to the desk where I am sitting, introduces herself and asks me my name. I tell her and then ask, "What do you really think of this school?"

She leans over conspiratorially and says in a low voice, "It's o.k., but they give you too much out of books."

Why Parents Might Choose This Kind of School for Their Children

As can be seen from the descriptions of Hale, Burncoat and Bridge, "fundamental" or "back to basics" schooling will most likely be chosen by parents who want their children to have an education that concentrates on children meeting the highest possible "academic" standards and becoming as proficient as possible in the basic skills of reading, writing, and mathematics as well as in all of the other traditional academic subjects -- science, social studies, music, art, etc.

Parents will also probably want such a school to make sure that their children will acquire a thorough knowledge and understanding of the cultural and intellectual heritage of Western civilization and the traditions and values of American

society. For some parents this would also include at least a nodding acquaintance with the religious values contained in the Judeo-Christian tradition and other major world religions.

And again as at all three schools, parents will most likely want the school to help them build a sense of character and morality in their children, so that students emerge from the school with an understanding of, respect for and commitment to the fundamental moral and ethical beliefs of the society in which they live and are prepared to play a productive role in maintaining the structure and advancing the goals of that society.

Perhaps most importantly of all, parents will want the school to make sure that their children are prepared to be admitted to and succeed in "high quality" (and probably very academic) high schools and thus be prepared to go on to college. Thus they will want an elementary school to give their children a solid foundation in all of the basic academic skills and be prepared to get good grades in high school and do well on such tests as the Scholastic Aptitude Tests (SATs). As Michael Friedman put it, if a school like this doesn't do that job, then it has no reason to exist.

How These Schools Go About Their Business

Most of these schools operate on the theory that, whatever degree of innate intellectual power children are endowed with at birth, this innate intelligence must be carefully trained and

shaped by a highly structured school environment designed and operated by trained professionals.

As part of this highly structured environment, children need to be instructed in a pre-determined sequence of basic skills and traditional subject matter beginning in kindergarten and continuing through grade 12. This sequence should be understood and followed by all teachers in the school.

Children should be organized into classes either by age or by ability and achievement levels. They should be able to demonstrate mastery of the required basic skills and content of one level of the curricular sequence before moving to the next.

Children need to acquire correct attitudes about morality and conduct. Therefore, the curriculum of the school should contain not only instruction in the basic skills and traditional subject matter but also a strong sense of morality and a belief in the values of American culture and society.

In order to learn and to acquire the necessary habits of self-discipline and proper behavior, children need a calm, orderly environment that can best be created by a firm code of school discipline understood by everyone and administered in a fair and just manner by the principal and all other adults in the school.

Parents should support the aims of the school by reinforcing the academic and disciplinary policies of the school through such activities as supervising the completion of children's homework.

What Children Should Learn

In most Option I schools, the "curriculum" -- the skills and subjects that children will be required to study and learn -- is determined and set forth by the school, by its administrators and teachers. In many public school systems, this curriculum will essentially be determined for all schools by the central administration and the local school board working under general guidelines and requirements laid down by the state.

In some schools of this type, the skills to be learned will be spelled out for the teachers and students in a way that describes what should be taught day by day and week by week.

A more typical situation is the use of generalized "curriculum guides" that prescribe a uniform, standardized curriculum in more or less specific terms, describing the material that should be covered at each grade level and the methods that should be used. Teachers are allowed to adjust both the material and the methods (to a limited degree) to fit their particular situation and the students they are teaching, but in general teachers are expected to cover the assigned material and to teach the specified basic skills at the specified grade level.

In most Option I schools, the curriculum will be strongly "academic" and will concentrate on the teaching of all of the traditional and established subject areas: language arts (reading and writing), mathematics, science, social studies, art, music, physical education, etc. Each of these subjects is broken down

by grade level, with the amount of material to be learned by students at each grade level carefully determined.

How Children Should Learn and Teachers Should Teach

In most Option I schools, all teaching/learning decisions are made by the school and the teacher. What is to be learned is transmitted from teacher to students. Students are expected to understand and learn what the teacher is attempting to transmit.

Students are thus expected to listen carefully to what the teachers are saying, to answer all questions when they are asked to do so, to complete all assignments in class, and to finish all homework assignments and to do as well as they possibly can on all tests.

How a School Should Be Organized and Run

All -- or most -- classes in Option I schools will be housed in single or "self-contained" classroom with 20 to 25 children and one teacher who is responsible for teaching most subjects (specialist teachers may teach art and music.)

In most of these schools, as is the case at Hale, Burncoat and Bridge, students are organized into classes and are taught according to their chronological age. That is, all six year olds will be in first grade classes, all seven year olds in second grade classes, and so on. This is called "heterogenous" grouping, meaning that children are not separated into different groups according to achievement level. In some cases, as at

Burncoat, teachers break such classes down into ability groups within the class, at least for reading and math.

In some Option I schools, however, children will be grouped "homogeneously," that is, they will be placed in classes according to how well they are achieving. All of a particular grade level's high achieving children, for instance, will be placed in one class, the middle achievers in a second class and the low achievers in a third class.

In most Option I schools, the school day is usually divided up into specified time segments or periods with each period designated for the teaching of a particular subject. Students and teachers must follow this schedule.

How Children Should Be Graded

In general, most Option I schools will carefully track each student's progress through frequent testing. These tests will most often be "letter-graded," with those students scoring the highest receiving As, the less successful students receiving Bs, and so on down to those students who are failing and receiving Fs.

For the most part, the grades will be assigned according to what is called a "bell-shaped" curve. That is, it is expected (and the curriculum and tests are so arranged) that only a few students will get As, a few more will get Bs, the largest number of children will get Cs, a certain number of children will get Ds and a few will be failures and receive Fs.

Thus all students in a class are in competition with each other to do well and receive the highest grades. Each student's academic progress is determined by the grades he or she achieves in class and on the tests. And, at a both Hale and Bridge, students will also be graded upon their degree of success in conforming to the school's behavior code.

All of these grades are then reported to that child's parents on regular report cards sent home.

Parent Checklist

Parents who wish to find out whether a school they are thinking about for one or all of their children is truly a "fundamental" or "back to basics" school might ask themselves (and the school) the following questions and make the follow observations when they visit the school:

1. Does the school have a written description of itself that places emphasis upon children learning the basic skills and upon the traditional "academic" subjects of reading, writing, literature, mathematics, science, social studies and the arts?
2. Does the school have as one of its main aims the development of a broad understanding of the cultural heritage and values of Western civilization, including moral and perhaps religious values?

3. Does the school feel that at least part of its job is to help parents build individual character and morality in the children who attend the school, to help parents instill in their children a sense of right and wrong and a respect for the values that parents have?
4. Does the school have a controlled, well-organized atmosphere? Are children quiet and well-behaved both in classes and when they are moving through the halls?
5. Does the school have a clear code of student behavior that all of the students understand and follow? Are there clear rewards for good behavior and punishments for infractions? Is this code of behavior administered by the school's principal and the teaching staff in a fair and impartial manner?
6. Are all classes held in self-contained classrooms with one teacher? In most cases, are the desks and chairs arranged in rows facing the teacher at the front of the class?
7. Are the school's classes organized by age levels? Are all six year olds in first grade, seven year olds in second grade and so on?

8. Is there a carefully developed schedule for all classes, with certain amounts of time devoted to each subject with most of the time devoted to the basic subjects of reading, writing and arithmetic?
9. Does the school administer tests to all children frequently? Are these tests "letter-graded" with As and Bs limited to only the best students in each class?
10. Does the school keep parents thoroughly informed about their child's academic and behavioral progress through regular report cards and parent/teacher conferences?

The Kind of Student Best Suited for This Option

Although a wide variety of children might possibly benefit from attending an Option I school, the kind of child who will enjoy his or her experience in this type of school and will benefit the most from this kind of schooling is most likely to be:

- a child who enjoys (or is perhaps even stimulated by) competing with other children for good grades and the rewards that come from academic achievement;

- a child who feels most comfortable in a highly structured, well-organized environment and is willing and able to obey the school's rules and regulations;
- a child who enjoys (or does not mind) performing tasks set for him/her by adults;
- a child who learning and will learn best in an orderly, step-by-step fashion;
- a child who is enjoys concentrating on learning basic skills and is comfortable studying and learning the basic academic subjects;
- a child who is enjoys (or is willing to abide by) the rules of a strict disciplinary code and who enjoys the rewards and approval that comes from good behavior.
- a child who needs the security provided by a self-contained classroom and being with the same teacher all day.

3.

Option II Schools: Continuous Progress, Non-Graded
Models: Mill Swan Communications Skills Center,
Worcester, MA

Rafael Hernandez School, Boston, MA

THE MILL SWAN COMMUNICATION SKILLS CENTER
WORCESTER, MA

Gilberto Morrow, a slightly chubby, curly-haired nine year old, is the student I am assigned to follow through a morning at Mill Swan Communications Skills Center, one of Worcester's ten magnet elementary schools.

Gilberto has been described to me -- with an affectionate grin -- by Mike Silver, the school's full-time curriculum facilitator, as "a real bad guy. When he first came here, he never paid attention, never did his homework. I told him at the beginning of the year that I was going to strangle him. Now he's really coming along. He may not be one of our best students yet, but he's getting there."

Since Gilberto is nine years old, he is technically classified as a "fourth grader." But, in contrast to the way most Option I schools are organized, at Mill Swan that does not mean that he spends his entire day with other nine year olds in a "fourth grade" class. The school operates by what is generally known as a "continuous progress" approach to school organization and grouping, at least in the areas of reading/language arts and math.

This means that during almost the entire morning children are grouped for instruction in these two subjects not by age but but by achievement level. At the beginning of each year, Gilberto and all of the children in the school from grades one through six are tested in reading and math.

At the beginning of each year, Gilberto and all of the children in the school from grades one through six are tested in

reading and math. All of the children who test out at, for instance, the third grade level in reading are grouped in one class. And all the children who test out as third graders in math are put in one class.

Thus Gilberto, who tested out at an "average" fourth grade level in both reading and math, finds himself in classes with nine, ten and eleven year olds (fourth, fifth and sixth graders), all of whom are working at his level of achievement. This means, in Gilberto's case, that he will have one set of classmates and one teacher for his language arts class and a different set of classmates and teacher for his math class.

According to Francis J. Trainor, "Our continuous progress organization, eliminates the situation we often had in the past where a fourth grade teacher might have as many as three or four reading or math groups in the same class, ranging from high-achieving kids to relatively low-achieving ones. Since the teacher could only work with one group and one achievement level at a time, the other two or three groups were left to do seat work, which most often was a complete waste of their time and a continual discipline burden on the teacher.

"Under our present organization, a teacher has only children learning at the same level and thus can move the entire group along just as rapidly as possible. And the children move at their own speed, too. If a child does very well at his or her third grade achievement level and is ready to move on, we can move that child into a higher group at any time during the year.

We don't have to wait until the next year, although most changes occur during the first six months.

"So we have some eight year old 'third grade' children here who are working at a fifth and even sixth grade level and not wasting their time back in a 'third grade' class. And we also have some 'fifth and sixth graders' who are back with the fourth grade achievement group, because those are the things they need to learn before they can move on."

The "continuous progress" organization applies only to the morning reading and math classes (with all teachers teaching classes in both subjects). For the afternoon classes in social studies and science, children are grouped "heterogenously," by age grades.

When I arrive in Joy Cherrier's reading/language arts class, Gilberto is already seated at a desk in the back of the room. The class consists of 20 children seated at desks that are more or less lined up rows. On the chalkboard at the front of the room is a list of the day's spelling words -- "cloth, paused, coil, poison, claws, ovster, faucet."

Ms. Cherrier has the class studying the comparative and superlative adjective forms. Three of the class's boys (not including Gilberto) have been lined up at the chalkboard in front of the room, it being quite obvious that they are of different heights. The class has been asked to work on the adjective "tall." On the chalkboard are three sentences: "Joey and Joey

are tall," "Joey Gigliotti is taller," "Joey Gigliotti is the tallest."

Gilberto and the other students have also been working on pages in a workbook. Cherrier calls on individual students, asking them to tell the entire class how they filled in the blanks on the assigned sheet. There is much waving of arms -- always including Gilberto's -- as the fledgling grammarians volunteer to answer the question. The first word they are working on is "strange," and the first sentence is "A giraffe is a _____ animal." The children are being asked what form of "strange" is appropriate for that sentence. The first child called upon answers "strange" and is rewarded with a "Good!" from Cherrier.

The second sentence is "A giraffe is _____ than a kangaroo." Gilberto's wildly waving arm attracts attention this time. "Stranger!" shouts Gilberto. "Right," says Cherrier. "Now, Gilberto, can you tell me why 'stranger' is right?" Gilberto thinks, but only for a split second. "Because you're comparing two animals." "That's right," says the teacher. The next sentence is "A giraffe is the _____ animal." Another child called upon is not so sure about this one. Once again Cherrier calls on Gilberto. "Strangest," he says. And why? "Because you're comparing three or more." "Right," says Cherrier.

The children then are told to go on working on their worksheets, while Cherrier moves around the classroom helping

individual students. As they finish their worksheets, they are then to start proof-reading the stories they have been writing for possible publication in "Mag Magazine."

At the end of Cherrier's reading/language arts class, Gilberto and I line up at the door with nine other kids and march through the halls, heading for Barbara Mahoney's fourth grade level math class.

There, Mahoney asks them about their homework assignments. One boy says that he left his book home. "No, you didn't," says Mahoney. "You left it right here in this room yesterday, so that's no excuse for not doing the homework." Gilberto also has not done his homework, telling Mahoney that he was sick.

After impressing upon the class that it is important that they all do their homework, Mahoney picks up a bundle of flash cards and starts going around the room, asking each child for the answer to the problem on one of the cards. "2 x 12 = ?" "24," says Gilberto. "1 x 12 = ?" "12," says another child. And so on around the room. The children are twitchy and squirmy. Mahoney raises her voice. "I don't call on anyone who makes noise. Now stop performing and start working! Gilberto, do you want to work down in the office with Mr. Trainor?"

After the flash cards, the class moves on to multiplication cards and to a multiplication lesson using a piece of paper tacked onto an easel in the front of the room. Gilberto is called upon and goes up to the board to do "4 x 6 = ?", "3 x 5 = ?" and "2 x 8 = ?". He does each problem perfectly.

Following this lesson, Mahoney has each child put their last homework assignment on the desk and check it over, as she moves between the rows of desks giving help.

* * *

Since the "magnet distinctiveness" of Mill Swan (in addition to its continuous progress organization) is its emphasis on "communication skills," the immersion of students in reading and writing begins early (they really mean it when they say "every student writes every day").

Indeed, one of the most unusual and interesting aspects of the Mill Swan program is the first use in Worcester of IBM's Writing to Read Program, a computer-based "instructional system" designed to develop the writing and reading skills of kindergarten and first grade students.

As Trainor puts it, "we've instituted this program -- and the rest of the communication skills program -- as a reaction to to what I see as one of the major problems in education today, the inability of children to write well and to want to write. And if they are going to want to write, then they need to see a reason for writing, why they should do it. And that's the theory we operate under here -- that writing is and can be satisfying and fun and has a point right from the beginning, right from the very first day. And one way we do this by getting children to write about their own experiences and ideas.

"The typical situation -- especially in fifth and sixth grade by which time the children know that reading and writing in

school are boring and pointless -- is that in September the teacher says 'Let's write about our summer vacation' and there's a proportionate number of groans -- Oh, do we have to do that!

"So here we encourage all kinds of writing -- poems, stories, essays, debates, editorials, news stories, anything that will get the kids writing and then, of course, reading what they write. Then as they get interested and need more skills, we gradually get them moving into more formal and highly skilled writing. And that's one reason we have our literary magazine. We don't just publish the 'best' writing. We publish examples of everybody's writing, mistakes and all, so long as they are working at it and improving."

The Writing to Read program is housed in a special room that used to be the stage of the school's auditorium. The kindergarteners, first graders and resource room and special needs children come to the Writing to Read Center for at least an hour each day. The Center is a large open space divided into five areas or "learning stations."

The first station is equipped with four IBM PCjr color computers that are also equipped with a speech attachment enabling the machine to "talk" to the user. The children I observed during one of the first grade sessions could hardly wait to get to the computers and put on the earphones. Here they are able -- with no difficulty that I could detect -- to use the computer to learn not just the alphabet but the 42 sounds or phonemes on which the English language is based. So they are also

learning to spell words -- but they are learn at this stage of the game to spell words phonetically, i.e., the way they sound rather than the way they are actually spelled. The word "ocean," for instance, comes out as "oshin," the way it sounds. They learn later, again without difficulty, I'm assured, to spell "correctly."

After beginning to get the hang of the alphabet and words, they move to a work journal station and the writing/typing station where they begin to write their own material -- stories or whatever they want to write -- and then to type them out on one of a battery of eight IBM Selectric typewriters.

There are two further stations -- one where they listen to recorded stories while following the printed page in a book and a station where they can make words, sentences and stories out of the phonemes by putting together a whole raft of printed phonemic blocks.

Janet Bedell, the Writing to Read specialist in charge of the Center, feels that the program is going well even though this is the first year it has been implemented. "It will be several years before we know whether and how much it pays off in the upper grades," she says. "but I know now that these kids have no trouble mastering the computers and the typewriters, and I can readily see them discovering the joys of using language -- in large part, I think, because they get to express their own ideas and feelings. They seem to love the idea that they can

manipulate the English language and produce things that they can feel and see and hold on to."

RAFAEL HERNANDEZ TWO-WAY SCHOOL
BOSTON, MA

The eighteen children in Lourdes Barrios' extended-day kindergarten class at the Rafael Hernandez School are playing a game of Red Light/Green Light. It is the early afternoon period immediately after lunch and, although the children have been here since early morning (this being an "all-day" kindergarten), their energy shows no sign of flagging.

As the children run pell-mell around the room's tables and chairs, Barrios cries out "Red Light!" and all of the children freeze -- or most of them do. The ones who failed to do so have to sit down, much to their disgust. Barrios says "Green Light!" and the running starts again. This goes on for a few minutes (and serves in part as the children's physical education period, since the school has no gym). At the end, the two winning girls are each awarded a lollipop.

The class is composed almost equally of Hispanic six year olds, some of whom speak no English at all, and black and white six year olds (or "Anglos") who speak no Spanish. Thus for most of the children, this class is their first serious introduction to a foreign language. And since the Hernandez is a "two-way bilingual" school, this is precisely the point. By the time these children leave this school after the fifth grade, the Hispanic children will be fluent English speakers and the Anglo children will speak fluent Spanish.

Following the "Red Light/Green Light" game, Barrios gathers the children into a circle, all of them, including herself, sitting on the room's carpeted floor. After a few minutes of

getting everyone settled down (not an easy job), she sets up a velcro-covered bulletin board on the floor beside her and opens a box containing cut-outs of the human body. She sticks the pieces on the board to form a complete human figure.

"Now," she says, speaking in English and calling first on the Anglo children, "what is this (pointing to the figure's head)?" "Cabeza!", answers the child called upon. "And this (pointing to the figure's arms)?" "Brazos!" shouts another Anglo child. "And this (pointing to the figure's hands)?" "Manos!" "Quantos manos?" she asks in Spanish. "Dos!", the same child answers.

She now continues in Spanish and begins asking the same questions of the Hispanic children. The answers come thick and fast. "Nose!" "Legs!" "Ears!" "How many ears?" "Two!"

There is suddenly a loud, building-shaking roar that overwhelms the class. No one pays any attention. It turns out that the Amtrak trains run directly beside the Hernandez building, and by now everyone is quite accustomed to the noise.

Barrios continues this lesson (which the children are obviously treating as one big fun game), but now switches to asking Anglo children questions in Spanish and the Hispanic children questions in English. They seem to have little difficulty switching back and forth.

Following the body game, she pairs the children off, half of them lying down on the floor and the others kneeling beside them. She then puts on a record containing a song sung in English,

again based on parts of the body. When the singer sings about wiggling toes, everybody wiggles their toes. When the song talks about "my friend helping me sit up", the child lying-down is helped to sit up by the kneeling child. She turns the record over, the same song is sung in Spanish, and the children perform the required tasks.

As a strictly monolingual observer with no Spanish proficiency, I felt seriously disadvantaged as I watched these six year old Anglo children run rings around me. The ease with which the classroom moves back and forth between the two languages is little short of astonishing.

* * *

The Rafael Hernandez School is located in a converted building that at one time was an automobile dealership (the principal's office is where the grease pit used to be) on Columbia Road in the Dorchester section of Boston. It shares its building with the central kitchen facility for the entire Boston school system.

The school houses 200 children from kindergarten through grade five, 60% of them Hispanic, 20% black and 20% white. About 80 to 100 of the Hispanic children (or somewhere between 60 and 80% of the school's Hispanic population) have a limited proficiency in English, at least when they enter the school. Since the school is a citywide magnet, about half the school's children come by bus from all over the city, while the rest can walk.

Margarita Muniz, the school's principal says, "We're almost the toughest school in the city to get into. We have a very limited enrollment because of the size of our building, and we have a very high retainment rate. So we have perhaps 10 to 15 openings a year in the regular grades and 25 in the kindergarten. Last year we had 119 applicants for those 25 kindergarten seats.

"As you saw," she continues, "our kindergarten class is made up equally of Hispanic and Anglo children, and they do all of the learning together. Then, starting in first grade, we move into a 'continuous progress' organization that involves both integration and mainstreaming.

"Let me explain what we mean here by those two terms. 'Integration' means that we group all of our children together in their home rooms by grade. That is, all of our first graders will be together for subjects such as math, social studies, science and music and art. And these subjects are taught in both languages. Since all of our regular teachers and, in fact, most everyone on our staff, are themselves bilingual, we can teach any subject in either language.

"However, for reading and language arts, we group our first and second graders who are not English proficient together in a class that is taught primarily in Spanish. And our Anglo children will also be grouped together, since we believe that you should begin to learn to read in your dominant language.

"Then in third, fourth and fifth grades, we group the children according to their various language abilities. While

remaining integrated for most subjects, our Hispanic third graders will have reading in Spanish for two periods and then one period in English. And the Anglo children will have two periods of reading in English and one period in Spanish as a second language. In fourth and fifth grades, our Hispanic children will have one period of reading and language arts in Spanish and two in English while the Anglo children are taught in English and continue their Spanish as a second language.

"In all cases we try to put children in reading and language classes in each language according to the level at which they are achieving in that language, so our classes often contain children of quite different ages.

"By 'mainstreaming' we mean that our Hispanic children as they go up through the grades and become increasingly fluent in English are gradually exposed to more and more classes taught in English until in the fourth and fifth grades, both they and the Anglo children are able to learn equally well in Spanish and English. And although both languages are used, the classes tend to be predominantly taught in English.

"Our Anglo children who are especially advanced in Spanish, however, will also be in advanced Spanish classes. It's all very complicated but it works quite well, although it takes a great deal of effort on the part of all of us on the staff to make sure every child is receiving exactly the kind of instruction that is appropriate to that child."

While the teaching of both English and Spanish is high on the Hernandez agenda, that is only the beginning of what Muniz and the school are aiming to accomplish.

"Of course, while we are teaching languages, we are also teaching culture -- and not just Hispanic, black and English cultures, although we do a lot with those. We see language as one of the main components of culture and perhaps the most important component, because it embodies the culture in a thousand ways, including how you feel about yourself, how you express yourself, all this says a lot about your culture. But then there are the physical, the external manifestations of a culture -- the music, the dances, the history, the sciences, everything.

"So we have here a truly multicultural program. In third grade, the children study Japan, in fourth grade Africa and in fifth grade America at the turn of the century. We work with the Children's Museum, Plimoth Plantation, the Community Music Center, Wheelock College and the Museum of Fine Arts. We try to integrate all of these with our cultural studies. For instance, around Columbus Day, we integrate Columbus' discovery of Puerto Rico and the mainland with Plimoth Plantation and Thanksgiving, and we have a big fiesta with a feast of roast pork and fried plantains.

"I think my mission here, this school's mission, is to help these children build inner strength and character. When you look at the statistics, when you see all of the teenage pregnancies,

when you see mere children having children, I know that even though we only go up through the fifth grade, our responsibility in elementary schools is extremely important.

"I want our children when they leave this school to have a real foundation. I want them to really think that education is important and worthwhile if they are going to make it through school and not drop out. And as you know, a lot of Hispanic children do drop out, and that has all of us greatly concerned. I think at middle and high school level the human element is often lost. Schools get large and impersonal, there's more of a lecture type of teaching. Teachers may not be as willing or able to listen to what's going on inside the children. And so there are a whole lot of children falling through the cracks, which, of course, contributes to a lot of children dropping out.

"Also there is a lot of fantasy out there that children are exposed to -- television, drugs, crime. It's very easy to fall into all that unless you have very strong parents who are going to steer you on the right course and know where they want you to go. You can easily get lost. And that's one reason we try very hard to get all of our parents involved in everything we do here. They are invited to take part in everything we do, including taking English classes for our Hispanic parents and Spanish for our Anglo parents. Many of our teacher aides are parents of children in the school.

"I often drop children off at the project after school, and I see drug deals going on all the time. In order to resist all

that, you have to be a very strong individual as a child to know that that's not right, that there is something better. So what I want to give the children here is the kind of inner strength they need to resist all that.

"So part of the philosophy here is that in this school, we're family. And as in all families there are good days and bad days. But when you go out of this school, there are no good days and bad days. They all have to be good days because you are representing our school, and that calls for a higher plane of behavior. And the kids know that. I give them a little speech about it every time they leave the building. And, surprisingly, it works. They know that I hold them up to be responsible, to be responsible children, and that moral nudge goes with them when they leave the building.

"So I want them to learn to be inwardly tough, not in a bad sense, but to be self-reliant, so that they can do things and survive. Then they'll be able to get ahead in life. So there are only two rules in this school. One is that we all have a right to be safe. The other is we all have a right not to get hit. If you follow those rules, you never get into trouble.

"So children love to come to this school -- our attendance is 98.4%, the second highest in the city. It's nice here, it's fun, it's exciting, and that's the way education should be. There's enough variety in this school to make up for all the things that most of these children don't have that suburban kids

get -- music, the arts and so forth. That's why it may cost a little more to educate our children, but it's well worth it."

* * *

Why Parents Might Choose This Kind of School

As can be seen from these descriptions of what goes on in the classrooms of these two "continuous progress" schools, the actual teaching style, the way the teachers go about the job of teaching, is not that different from the teaching in the Option I schools. The classes are controlled and directed by the teachers. In both Worcester and Boston there, are sets of curriculum guides that all schools are expected roughly to follow, and for the most part both Mill Swan and Hernandez do follow the prescribed curriculum.

There are, however, some major differences -- the most important being the attempt through the "continuous progress" organization of the classes to make sure that every child -- at least in reading and math -- is being taught at an appropriate achievement level.

This arrangement is part of the school's effort to provide every child not only with a curriculum that is best suited to that child's needs and interests but to make sure that every child is learning at a pace which enables him or her to progress through the curriculum at an appropriate speed and the greatest possible degree of success.

What Children Should Learn

Like most schools, the curriculum of continuous progress schools will most likely include all of the traditional basic skills subjects -- reading, writing, literature, mathematics, science, social studies, art, music and should also include (for both boys and girls) practical subjects such as woodworking, the domestic sciences and career exploration and career education.

How Children Should Learn and Teachers Should Teach

For the most part, classes in a continuous progress school -- especially those in language arts and mathematics -- are taught in a traditional fashion. The lessons are prepared by the teaching staff and presented to the students by the classroom teachers just as they would be in a "traditional" school. The fact that all of the children in any given basic skills class are all working at the same level of achievement, however, makes it possible for a teacher to teach the same lesson to the entire group all at the same time.

In the other subjects -- science, social studies, art, music, the practical arts, career exploration, etc. -- the classes tend to be less formal. Students are often engaged either on their own or in small groups on projects either suggested by the teachers or developed by the students themselves. Often, these projects will encompass several academic subjects. Thus at Mill Swan, for instance, social

studies and science are integrated into "interest units" that the children can select.

Indeed, in these classes, in which children of several different achievement levels are mixed and in which they all work together on projects, children are often given a great deal of choice about what they will study. And much of the time the students are working and learning pretty much on their own, with general supervision rather than formal "teaching" by the teachers.

How a School Should Be Organized and Run

Since continuous progress schools operate in conventional school buildings, classes are taught in conventional self-contained classrooms. In the course of the day, however, students will be grouped by those similar achievement levels in one particular classroom for a subject such as language arts and will then move to another classroom and another teacher and be regrouped in that classroom by their achievement levels in math.

Some continuous progress schools operate in school buildings that were specifically designed for this kind of school organization. In order to facilitate the grouping and regrouping of children, many of these schools do not have conventional self-contained classrooms but rather have large open spaces within which teachers and students hold classes, separated only by bookcases or special space dividers.

During the 1960s, many of these "open space" schools were built around the country and have operated with varying degrees of success. Teachers have, in many cases, found it difficult to teach in such spaces, which tend to be noisy and distracting to students. Indeed, one of major school facilities reform movements of the 1970s and 80s has been to build walls in open space schools and create self-contained classrooms.

Whatever the space arrangements in a continuous progress school may be, this approach to teaching and learning does require teachers in such a school to work closely together in an arrangement often referred to as "team teaching." This means that, since several teachers will be teaching the same child different subjects, the teachers have to confer frequently and work together closely to make sure that each child is progressing in all subjects and to track that progress.

In most continuous progress schools, the daily schedule will not be laid out in regular chunks of time or periods with each period clearly devoted to each particular subject. Rather, the schedule will be divided roughly into large blocks of time, often two or even three hours in length, within which teachers are free to organize their time according to their students' needs.

How Children Should Be Graded

In many continuous progress schools, while students are frequently tested to make sure that they actually are making progress in their studies, students are not considered to be in

direct competition for "good grades" with all other students. Rather, each individual student's progress is measured in terms of how much the child has learned in each subject given the place from which the student started at the beginning of the school year.

It is in this sense, then, that each student is expected to "progress continuously" through the curriculum and to do so at his or her own most natural rate of speed, without regard to what other students are doing. Students are thus in competition only with themselves and are encouraged to learn as quickly and as well as they possibly can, without feeling that if they do not learn as quickly as some other students they are therefore "not as good" as those other students.

Thus students in most continuous progress schools are not graded on a "bell-shaped curve,". Indeed, many continuous progress schools do not use letter grades. Rather, they use numbers, with a grade of "1" meaning that the child is progressing well according to that child's ability and appropriate rate of progress. A "2" would mean that the child is not progressing as rapidly as the school believes he or she could, and so on.

It is thus possible in a continuous progress school -- indeed it is one of the aims of most such schools -- that all children in the school could get "1's," which would mean that every child is progressing through the curriculum just as rapidly as he or she can.

Parent Checklist

Parents wishing to have this "continuous progress" or "non-graded" form of education for their children might ask themselves (and the school) the following questions and make the following observations when they visit the school:

1. Does the school have a written description of itself that places emphasis upon children learning the basic skills and upon the conventional "academic" subjects of reading, writing, literature, mathematics, science, social studies and the arts?
2. Does the school stress that one of its primary aims is to make sure that every child reaches his or her full intellectual and social potential?
3. Does the school believe that individual children differ widely in their abilities, interests and talents and that it is the school's job to provide each child with an education that fits those abilities, interests and talents?
4. Does the school believe that, while all children can learn and eventually acquire all the skills and knowledge they will need to succeed in life, children do not all learn at the same rate and that schooling should be organized so that

every child can move through the curriculum at his or her own rate?

5. Does the school use a grading formula that measures each student's progress in terms of that child's abilities and expected rate of learning?
6. Does this belief lead the school to organize its classes so that all children who are achieving at a certain level are grouped together in the same class, regardless of age, at least for language arts and math?
7. Does the school make sure that each child has the opportunity to explore his or her interests and to develop all talents that he or she might have?
8. Does the school set aside large blocks of time for language arts and math?
9. Does the school keep parents thoroughly informed of their child's academic and behavioral progress through regular report cards and parent/teacher conferences?

The Kind of Student Best Suited to This Option

The child who will most likely benefit to the greatest degree from attending a "continuous progress" or "non-graded" school is:

- a child who does not particularly enjoy or profit from competition with other students, especially academic competition for grades;
- a child who feels most comfortable in an educational atmosphere that is well-organized and basically run by adults but is also relaxed and somewhat informal;
- a child who enjoys and/or needs an environment in which the learning tasks are established and directed by the teachers in the school;
- a child who has a variety of individual interests and talents and enjoys exploring and using those talents;
- a child who is able to and interested in obeying the school rules but is also able to exercise self-discipline when necessary;
- a child who does not mind moving from classroom to classroom and being taught by different teachers in different subjects.

4.

Option III Schools: Montessori, Developmental or "Open"
Education, Micro-Society

Models: Bennett Park Montessori Center, Buffalo, NY
Graham and Parks Alternative Public School,
Cambridge, MA
City Magnet School, Lowell, MA

BENNETT PARK MONTESSORI CENTER,
BUFFALO, NY

70

95

In Evelyn Clements' classroom at Bennett Park, 18 young children move busily around the room. Most of them are three and four year olds. Most of them are three and four year olds, with a few fives thrown in.

The room itself is bright and sunny. Most of the room is covered by soft carpeting. The other part has a wooden floor. As I enter the room, approximately half of the children are busily at work on a variety of tasks -- quite on their own -- in the uncarpeted space. Some of them are working at a water table pouring water from small containers into larger ones or vice versa. One girl -- she must be one of the three year olds -- has a cake of soap and is happily making a sudsy mixture in a bowl. After working the mixture up to her satisfaction, she begins making soap bubbles and watching them form and disappear.

In the carpeted half of the room, children are sprawled comfortably on the floor working with a variety of different materials. In some cases, the children are working by themselves. In other, two or even three children will be working together. Each child has his or her own small rug, and whatever materials the child is working on are always laid out on his or her rug.

As I watch, two small boys -- one white, one black -- go to one of the shelves that are all around the walls of the room and take down a set of long, thin wooden red rods, of different lengths. They carry the rods over to their rugs, an operation that takes several trips. Once they have the entire set on their

combined rugs, they begin to arrange the rods according to their lengths -- starting with the longest rod and working down to the shortest.

The two boys seem ferociously intent upon what they are doing. Occasionally, there is sharp disagreement about which rod goes where. The boys discuss things and each shows the other where it should go. After a moment's argument, both boys agree on the rod that should be next. In short order, the complete set of rods is properly laid out. They then take the set apart again and begin piling the rods one on top of the other, with the longest rod on the bottom and so on until the shortest rod is sitting on top.

After this exercise -- which has taken about ten minutes -- they decide they have had enough of the rods. They each take half of the rods and carefully put them back on the shelf in exactly in their place -- and in the proper order.

While all this has been going on, a five year old girl has been sitting beside her rug a few feet away. She and the class's assistant teacher, Joan Hyman, have been working with a set of cards. Each one of the set of cards has on it the outline of an apple, but each is slightly different. One card will have the whole apple colored red and at the bottom of the card, the word "apple." Another card will have the outline of the apple, but only the central part colored in red and beneath it the word "core". There are similar cards with the different parts of the

apple outlined in red and words such as "pulp," "seeds" and "skin" written underneath.

The girl has beside her another set of cards that have the same pictures but no words and a third set that has nothing but words or "labels". While the assistant teacher silently watches, the girl begins matching the cards with pictures but no words with the cards laid out on the floor. She places the card she is holding -- the one with the picture of the full apple but no word -- next to the picture on the floor that is also of the whole apple. She then continues this operation until all of the picture cards on the floor have been matched.

She sits back and admires her handiwork for a minute or two before launching into the next activity -- matching the labels to each of the cards on the rug. When this is finished, she carefully copies each of the labels on a piece of paper and shows them to the assistant teacher, who smiles and acknowledges the completed activity. The girl then carefully undoes the pile of cards and puts each set of cards back into their proper place in the box. She then carefully replaces the box in its proper place on the shelf.

While all of this had been going on, the other children in the room are busy at their projects, all of which they have selected for themselves, using the various materials and equipment that have been placed all around the room.

One boy, who has been to the classrooms water faucet and sink to get water for his pouring exercises, takes a quick drink

from his cup before carrying it back to his table. Another girl is carefully observing a pumpkin sitting on a table (it is almost Halloween) and is writing words about the pumpkin on a piece of paper -- "Holloween", "Dracula", "ghost," "princess." No one attempts to correct the spelling, the point being to encourage the child to use and write words.

The room is a bustle of activity, with virtually every child engaged in one or another project, almost always a project chosen by the child himself or herself but at times children working together on activities they have jointly selected.

In addition to these in-classroom activities, the children have several out-of-classroom things they can do on their own when they feel moved to do so. Out in the hallway, for instance, there is a set of climbing equipment. If a child feels it is time to get some large-muscle exercise, he or she goes to the doorway and takes a red wristband hanging from a hook there and puts it on. This means that he or she is one of the two children who can go out into the hall and climb on the equipment. If there is no red wristband on the hook, this means that there are already two children on the equipment and the new child must wait until a red wristband comes back.

Similarly, there is another hook with two orange wristbands on it. These are for going to the library. A blue necklace is for going to the bathroom. Waiting for and taking turns is something the children have apparently learned well.

* * *

Dr. Rae Rosen, the "director" of Bennett Park (Montessori schools have "directors," not "principals").

"It isn't always easy," she tells me, "to see right off what the point of some of the activities are. And yes, a great deal of it can seem like play. But, of course, that is one of the basic tenets of the Montessori system. To the very young child, it should very much seem like play. It is, in Montessori's words, 'spontaneous' activity -- children choosing and doing things because they want to do them. After all, children are naturally curious and love to manipulate real, concrete things and objects, to test them out, see what the things in the room can do and what they can do with them.

"But the essence of the Montessori method is that every piece of material in the room has a very specific purpose. Montessori herself, back at the turn of the century in Italy, spent long hours observing young children, watching what they spontaneously did outside school, in their everyday life, and also what they did and didn't do in school when they were exposed to formal teaching. What she discovered was that young children could learn a great deal more than what is normally expected of them through their own activity, through using their own senses and manipulating concrete materials if the materials they had to work with were appropriate. They didn't need to be 'taught' or 'instructed' in the way most formal or traditional schools attempt to 'teach' or 'instruct', ways that often kept the children from learning.

So she set about creating the right kinds of materials and equipment and trying them out with the children. She discovered that these carefully made materials were 'auto-didactic,' that is, they were 'self-teaching.' By using the materials on their own -- under the guidance of a carefully trained teacher -- children could essentially teach themselves.

"So she eventually arrived at what she called 'the prepared environment,' a classroom (and therefore a school) that was filled with just exactly the materials and equipment that the children need to develop their senses and their minds and thus to learn all the things they need to learn -- including reading, writing, and math. But, she believed, they would really learn all these things because they would have developed the basic concepts through their manipulation of the materials long before they ever had to print them out and make formal rules and notational systems like numbers and spelling.

"For instance, the red and blue rods you saw the two boys playing with. The smallest rod is one decimeter, the next biggest rod is two decimeters or twice the smallest one. The next one is three decimeters and so on up to the big one which is ten decimeters or ten times the smallest one. So, while the children seemed to be 'playing' with the rods -- and to them it was playing -- they were being introduced in a perfectly natural, easy, 'spontaneous' way to some of the basic principles of mathematics.

"On one level, they can see that two of smaller or one decimeter rods together add up to one of the three decimeter rods and that ten of the smallest ones are equal to the biggest rod. Or that it also works in reverse -- that if you have two five decimeter rods lined up end to end so that you have a rod as long as the ten decimeter rod and then you take one rod away, you have one five decimeter rod left. So they are beginning to work out the principles of addition and subtraction.

"And they are also beginning to develop what Piaget calls the 'conservation of number,' the idea that the number one always stands for the same thing, no matter what context you may use it in, that two plus two always equals four. But always starting out with concrete objects and working from the concrete to the abstractions. It doesn't make much sense to start teaching young children arithmetic out of a book or on a chalkboard unless they have thoroughly grasped the idea of what a number is. Which, I think, is why so many children in the regular schools having such difficulty learning math and may end up hating it.

"And, of course, many of the Montessori materials are carefully sequenced from very easy to increasingly challenging, so that the exercise, the task, contained in each set of materials leads directly and naturally into a more complex task embodied in the more advanced set of materials. For instance, the set of rods you'll see in the five to seven year old class will have one centimeter number squares to go with them so that

the children can now begin to match ten number squares to the ten decimeter rod and so on.

"Or take the the girl working with the cards -- these are called nomenclature cards. Like all of the material those cards are accomplishing a wide variety of things all at the same time. In one sense, they are teaching the basic principle of reading and writing -- that words stand for something. The word apple "stands for" the object apple. But the cards are also teaching some of the basic rules of classification -- that all objects in the living world have been divided into categories, such as fruits, vegetables, animals, fish and so on -- and that in the case of a fruit like the apple that each fruit is subdivided into its main parts -- skin, core, pulp and so on. All of this is in preparation for the further study of biology that they will get to later on."

* * *

In Diane Sauer's five to seven year old class, the room is set up in a fashion very similar to the three to five year old class. The shelves surrounding the walls are once again filled with a rich variety of materials, some identical to those in the younger class, some more advanced. The children behave in the same way, quietly going to the shelves and choosing the piece of material or equipment they wish to work on. And, very importantly, putting the material carefully back in its proper place when they have finished. So this room, too, is full of

busy children scattered throughout the room working on their own or in pairs.

One boy is working on an advanced set of the red rods -- but now matching the number squares to the centimeter markings on the rods.

Two girls are also working on an advanced set of nomenclature cards, a set about tortoises. But now, in addition to naming the various parts of a tortoise, the exercise includes simple, brief stories about tortoises rather than single words. Part of the exercise is for the children to take pencil and paper and write down the information they have gleaned and also to write stories of their own.

Sauer and her assistant teacher are this morning joined by Karen Biernacki, a new teacher who will be taking over for Sauer when she goes on maternity leave. All three teachers are moving about the room, observing what the children are doing and providing help and encouragement when asked.

Biernacki takes time out to show me a set of materials called "the golden beads." These are small glass spheres that come in different groupings from single beads to groups of ten, 20, 50 and 100 held together by copper wires. By stacking these beads in different combinations -- and by unstacking them -- the children are once again concretely exploring the basic concepts not only of addition and subtraction but now multiplication and division, since two of the ten group are equivalent in size to one of the 20 group, ($2 \times 10 = 20$).

* * *

"I suppose," says Rosen, "that you could say that we see our primary job as preparing the environment to suit the needs, interests and abilities of the children. And by that I mean really preparing the environment with exactly the right materials. Nothing is left to chance. Every piece of material, every bit of equipment, has a precise aim and precise exercises built into it. Every piece of material is part of a carefully designed sequence of other materials, from simple to more complex and demanding.

"It's the teacher's job to make sure that his or her classroom environment is properly prepared and that the children know what to do with each of the materials. In fact, at the beginning of a year, there are very few materials in a classroom. The teacher takes each piece of material, and before putting it on the shelf, she gives what we call a "classical presentation." That means that she demonstrates to the children how it should be used. This is largely done non-verbally. She simply does it herself and shows them how to use it. Then it goes on the shelf and can be freely chosen by the children.

"After the environment has been properly prepared, the second job of the teacher is to step back and observe, to watch the interaction between each child and the materials, to assess the child's understanding of the concepts imbedded in the material. The teacher may then assist an individual child who is having difficulty with the conceptual understanding, or she may

provide additional information or language for a child who is ready for advancement. In either case, she will not intervene in the child's learning process, unless it is developmentally appropriate.

"The children, of course, are able to choose the materials they wish to work with. And this makes sense, because children almost always pick the material that is just at their appropriate level. They may pick and work with a piece of equipment that they've already mastered -- they don't see that as boring -- but they may also pick the next level of material, because that offers them a new challenge, something new to learn. And, for them, that's the "in of it all."

And why the "vertical grouping?" Why put three four and five year olds together in a class? Or five, six and seven year olds?

"That's easy," says Rosen. "Because it's more natural, more like living in a family, which is the general atmosphere we want to create in this school. How many situations out in real life do you know of where a child associates only with children exactly his or her age?

Of course, such grouping has enormous educational benefits. The older, more experienced children -- let's say the four or five year olds in a three to five class -- can obviously provide a lot of help for the three year olds. The older children do a lot of the teaching of the younger ones -- what the classroom behavior expectations are, how you behave and don't behave, how to use the material and equipment. In that

sense, all of the children 'play' with each other and teach each other things, just as they do in the real world out there

"After all, we would never dream of teaching one and two year olds to speak English in a class of some kind. They learn to speak quite naturally and quite informally first by hearing older people communicating that way and by wanting to communicate themselves. No one 'instructs' them. Later on we help them to speak correctly and then we help them to read and write the language they speak, but that is really what they need -- help to do what they want to do anyway."

"Perhaps I could sum up best what we're all about here by quoting Montessori's saying that 'the child's work is to create the man.' So our main job is to allow children to do just that, to utilize their play as work, creating themselves as capable, independent, functioning adult people.

"And that, I think, is the point of any kind of 'activity-based' schooling, whether it's Montessori or 'open education' or whatever. It's only through children actually doing their own learning, by choosing and manipulating materials and objects, that they genuinely understand what they are learning and therefore that they really learn it. And, of course, as they get older and have acquired and understand all of the basic concepts, things like books and reading material of all kinds become the natural objects they need and can use.

"It is sometimes difficult for people -- for parents -- to see just how all this works. For instance, part of what we call

our 'Practical Life' exercises involves children learning what seem to be simple things like three year olds learning to tie their own shoes and put on their own coats and learning to wash their hands neatly and put everything back in its proper place. But these exercises all have to do with both large and small muscle control as well as self-reliance and responsibility.

"One parent told me that her three year old came home one day and told her 'I washed my hands today!' The mother was a bit amazed, but after she had visited the class and saw what was going on and what the Practical Life exercises were all about, she said to me 'I didn't have any idea that something so simple as washing hands could be so important.'"

GRAHAM-PARKS ALTERNATIVE PUBLIC SCHOOL
CAMBRIDGE, MA

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Graham and Parks is an unusual school in at least two ways. It is, first, a modified "open education" or "integrated day" developmental school. As is the case with the developmental approach employed at Bennett Park Montessori Center, the educational philosophy, the classroom practices and the informal school atmosphere at Graham and Parks are all based upon the belief that children are capable of developing their intellectual, social and moral capacities largely on their own, through their own self-selected activity, rather than through formal "instruction" in conventional classes. As with Bennett Park, this school aims to assist children in developing both initiative and responsibility in their learning and, indeed, in their lives.

As the school's description of itself puts it, "we try to balance freedom and responsibility for the students; we are truly concerned about the child and the curriculum and we are concerned with educating the whole child -- the head, the heart, the body and how these inter-relate. There is a strong emphasis on self- and social awareness; we want our children not only to be capable, to have skills and knowledge, but to be lovable, to like themselves and others."

Secondly -- Graham and Parks is unusual in that the school believes in and practices a system of "shared governance" or "shared decision-making" in which all major decisions -- what the school will be like, how it will run, who the teaching staff will be -- are all made by parents, teachers and principal together.

This approach to governance was built into the school right from the start since, after all, this was a school started not by the school system but by a group of parents who believed that it was the duty of their local public school system to provide all parents with the different kinds of schooling parents wanted. These "shared governance" arrangements at Graham and Parks are described in detail in Section VI below.

* * *

All classes (except kindergarten) at Graham and Parks are vertically grouped (that is, they contain a mixture of children from at least two grade levels), just as they are at Bennett Park and for precisely the same reasons.

The classrooms at Graham and Parks are also "prepared" by the teachers as they are in a Montessori school but in a somewhat different fashion.

For instance, in Judy Lazarus' first/second grade classroom, the room is broken up into separate areas more or less as at Bennett Park -- a special carpeted area filled with books and other materials for quiet reading, a math area full of specialized math materials such as blocks and rods similar to the materials in Montessori (except that here they are Dienes blocks and Cuisinaire rods), a science area that has an aquarium with fish and a terrarium with a toad, another area for social studies and one for art that is filled with easels, paints, etc. These areas overlap and are filled with tables and chairs.

Graham and Parks differ from Bennett Park Montessori in that while the classroom is thus full of materials that children can use largely as they see fit and while many of these materials are carefully selected by the teachers so that the children using them are involved in very specific learning experiences, the largest amount of the materials are developed and/or selected by the teachers or are actually brought into the classroom by the children themselves.

Rather than using a strict and almost entirely prescribed set of materials and using them in a rigidly prescribed fashion, the children in a genuine "integrated day" or developmental school are free to and are encouraged to invent their own activities and learning experiences. This can happen individually or in small groups. Sometimes these activities are suggested and organized by the teachers, sometimes the activities and the materials used are invented quite independently by the students themselves.

Children will often bring materials in from home or the outside world -- a live toad, for instance, will become the spontaneous source of a biology lesson for one curious student, a group of intrigued students or even the whole class. Students are encouraged to bring in their own books and reading materials which they are free to go off into the reading corner to read or that they can add to the classroom's library. Students are also encouraged at all times to write about their experiences and

activities, and these productions, too, become a major part of the class' reading program.

Thus a truly developmental or "integrated day" classroom may well, in contrast to an Option I or II classroom and even to a Montessori classroom, appear to be a somewhat disorderly hodge-podge of "activity," with children moving actively and busily about the room engaged in a wide variety of self-propelled activities.

Since the "integrated day" or "developmental" approach at Graham and Parks is what the school calls a "modified" version, things are a bit more organized in Lazarus' classroom than they might be under ideal circumstances. For instance, in the quiet, carpeted reading area, there is on an easel board the class's schedule for the day [with my explanatory comments in brackets]:

Wednesday

- 8:30 -- silent reading [often with parents helping out]
- 9:00 -- class meeting [everyone gets together to talk about the day's activities]
- 9:30 -- handwriting
- 10:00 -- music
library [the class splits up for these two activities which take place elsewhere]
- 10:30 -- recess
- 11:15 -- math [broken up into individual groups and with most children working independently]

12:00 -- lunch
12:30 -- story [stories read to and by children]
1:00 -- language skills [also broken up]
1:30 -- choice [children select their own activities]
2:30 -- circle [everybody gets together to discuss
what's happened during the day and plan the
next day's activities]
2:45 -- go home

Reduced to paper in this fashion, the schedule sounds deceptively rigid (and, indeed, in the purest forms of the "integrated day", there probably would be no such schedule). It is deceptive in the sense that it conveys no sense of the hum and busyness of the class in full swing or the amount of individual freedom and choice that goes on within those labels.

As I enter the classroom, the children are just getting back from recess. They file into the room more or less in single file, but quickly break their lines and head for a large stack of cubby holes that line one of the walls. Every child has his or her own cubby, and some of the children pile their coats into the one that belongs to them. They disperse in an animated fashion throughout the room.

According to the schedule it is time for math activities. The session begins with everybody gathered together in the carpeted reading area, with all of the children seated in a semi-circle on the carpet. Lazarus and Chris Bentley, the class's

student teacher from Tufts University, are standing in front of the semi-circle.

"I'm going to show you how we're going to do the math today," says Lazarus. "We're going to work on lengths and distances. Some of you are going to get your rulers and a piece of paper and measure any of the things you want to in the classroom. For instance, if you wanted to measure this easel" -- now using the easel the schedule is on -- "how would you do it?" Several of the children show her how it would be done.

She and Bentley now divide the class up into three different groups. One group (apparently the most eagerly sought according to the number of waving and volunteering hands) will be working off in a separate area doing geo-boards (small boards with nails placed at regular intervals that children can make different geometric shapes on with rubber bands). The largest group will get their rulers and pieces of paper and begin measuring objects in the room and carefully writing the results ("Always in feet and inches, or else I might think its three elephants you're talking about!") on their pieces of paper. These two groups will be supervised by Bentley

Lazarus, meanwhile, will take a small group of six of the less advanced children into the math area to work on less advanced forms of measurement. She and the group all sit down at a table.

"First," she says to the group, "find a part of your body that might be one inch long and tell me what it is." The

children pick out "toes", "nose", "knuckle". "So," says Lazarus, "if you don't have a ruler, you can remember what part of the body you used to tell what an inch is."

She then passes out a 12 inch ruler and a small block of wood one inch long to each child. She asks them to place the block on the ruler and find the marks on the ruler that are exactly one inch long. They do it quite easily. "Now find the mark that tells you how long six inches is." They do that. "Now seven inches." They do that, too.

She then gets out a box of plasticene strips and gives each child a strip that looks to be about four inches long. "Now how would two people share one of this pieces of plasticene equally?" she asks. As several children suggest that you might break it in two, Lazarus says "That's right," and they all break their pieces in two.

While this activity is going on, Bentley is moving around the room watching and helping children who are either doing their geo-board exercises or moving all over the room measuring trash baskets, the aquarium, bookshelves, tables, chairs and each other, writing the results carefully on their pieces of paper and often busily conferring with each other and comparing results.

The room is a buzz of busy activity, so much so that at one point Bentley says loudly, "Math people, freeze! You're making too much noise! For the next ten minutes, no talking!" For perhaps two minutes, the room is fairly quiet. After that, the hum rises again, but never back to its original noise level.

Judy Lazarus has taught at the Cambridge, Alternative Public School and now at Graham and Parks for the past ten years. "I would say that it takes almost that amount of time," she says, "to learn how to be a really good teacher in a school like this. And --," here she sweeps her arm to indicate the entire room --, "to get the room developed so that it has enough of the right kind of stuff and materials to make it work. It takes me anywhere from 50 to 60 hours a week to do all of the preparation and the actual teaching, even with Chris and a part-time aide to help.

"What we're trying to do here is to have children become involved in learning all sorts of different things and to learn it in all sorts of different ways because they are intrinsically motivated to do so, because they want to do it. And that works, if children are engaged in their own learning and not always something that adults impose on them. It's a little like planting seeds. You put the seed in the ground and give it the proper attention and encouragement and watering, and all of sudden you look around and -- my goodness! -- it's growing! You don't have to hit them with a hammer.

"What I am interested in doing here -- and I think the whole school feels this way -- is to create an environment where every child can succeed, even if to begin with it's only being the best cricket catcher in the class. We have an enormous range of children among the 25 in this class, everything from children at a kindergarten level to children reading at a sixth grade level.

So you can't teach them all the same way or use the same materials.

"In fact, we create most of our own curriculum. We -- myself, Chris and the children -- all decide together what our 'units' will be. This year we've had units on Autumn Changes, the Hopi people, Winter Celebration, Peace, Lines and Sizes. We'll be doing at least one more, and we haven't decided yet what that will be.

"I guess what I'm basically trying to do, what the school is trying to do, is to empower children to become their own learners, to feel good about themselves, to make their own choices and have lots of self-esteem and lots of self-confidence in their own abilities."

CITY MAGNET SCHOOL

LOWELL, MA

The building is old and dilapidated, built in 1935 by the Works Progress Administration (WPA) as a trade high school in the middle of downtown Lowell. It is surrounded by mill buildings that are now being rehabilitated and restored as part of the nation's first urban national historical park.

Over the battered front door is a bright blue sign saying "The Lowell City Magnet School." After passing through the door, visitors are greeted by two more signs. One says "Welcome to the City Magnet School, the Nation's Only Micro-Society School." The other, a large banner donated to the school by the graduating class of 1985, says "We've Done So Much With So Little For So Long, We Can Now Do Anything With Nothing," a saying that is fast becoming the school's unofficial motto.

It is a saying that sums up the vitality of this magnet school (one of two in the city) where students participating in a miniature society run their own court system, businesses, law firms, publishing companies and even their own police force.

The magnet school's first job is the teaching of basic skills: reading, writing and arithmetic -- all things every parent expects a school to do.

But a micro-society attempts to achieve this goal in a very different way. The school, its students, teachers, principal, and its parents have created a miniature society where young people have to literally work to "make it." Just as importantly, in this micro-society, students must participate. To facilitate

this participation, the City School has set up an intricate system of participatory structures for students, teachers and parents that run through all aspects of the curriculum and governance of the school. These decision-making bodies are engaged in shaping the future of the City School, working to make it more of a mirror of our society and more of a participatory democracy.

* * *

City Magnet School fairly hums with activity. In the principal's cluttered office, a volunteer parent mans the secretary's desk while the bearded, 38 year old principal, Robert Weintraub, talks on the phone, answers questions from students and teachers and welcomes me, all at the same time.

Between phone calls and interruptions, Weintraub fills in some of the background on the school. It was created, he tells me, almost five years ago now as a major part of Lowell's system-wide plan to reduce minority isolation. It started from scratch as a city-wide magnet running from kindergarten through grade eight. As "city-wide school" it has no neighborhood attendance area. The more than two hundred students (with a lengthy waiting list of students who wish to get in but for whom there is no room) come from all over the city. They are all volunteers -- that is, their parents have taken them out of the neighborhood schools and asked that they come to this school. So, in that sense, the parents are volunteers as well. Students are admitted

on a first come, first served basis, with 40% of the seats reserved for minority students.

"Our teachers are volunteers, as well," says Weintraub. "And so am I. So, in that sense, everyone in this school -- students, parents, teachers and principal -- has chosen to be here and wants to be here. What that means is that everyone here is in agreement that the school is and should be a micro-society school. There is probably not total agreement on exactly what that means, since we are still very much in the process of developing the school. We are growing and changing things every day, so there is a great deal of arguing back and forth, and that's healthy and as it should be. But it does make an enormous difference that we all have a basic agreement about what kind of school we should be. It makes us able to get on with the job, with everyone participating instead of arguing about whether we should or should not have a school like this."

A "micro-society" school is based on the idea that the students -- with the help and guidance of their teachers -- have to design and run their own democratic, free-market society in school. The students -- with the help of the teachers, of course -- have over the past five years set up their own government, creating their own legislature, executive and judicial branches. They have written and (and are continually revising, amending and up-dating) their own school Constitution and their own school laws, set up their own courts and system of justice, their own system of taxation through their own internal revenue service,

their own elected legislature, their own City School lottery and even their own police force called the City School Crime Stoppers.

They have also created their own school economy and their own currency -- called Mogans instead of dollars, named after Patrick J. Mogan who was superintendent of school in 1981 when this magnet school was created. The students run two banks -- every student in the school has his or her own bank account -- and a whole slew of businesses, including law firms, corporations that manufacture and sell decorations and toys, retail enterprises that sell such things as stationery, pencils and erasers and so on. There is also a thriving publishing side to the curriculum, which essentially constitutes the school's language arts program. Students write, edit and publish their own newspapers and magazines.

And all of these activities are real jobs -- everyone gets paid for doing all of these things, everyone has to have and hold a job in the micro-society and earn his or her own keep, just as most people do in real life. Another of the school's mottos is "In this school, there's no free lunch."

In order to learn all of things a student needs to learn in order to earn a living and participate in this school society, students have to "go to school." They have to take classes and study and pass what the school calls "competency exams". These are exams established by the teachers that every student must take and pass before he or she can get and hold a job.

For instance, in order to get a job in a bank or start a business, students have to pass the banking and accounting competency exam. In order to get a job on a newspaper or a magazine, a student must pass the publishing exam. In order to become a lawyer or a judge in the judicial system, a student has to pass the bar exam. Before any student graduates from this school, he or she has make a hard, honest attempt to pass all of these comptency exams, thereby demonstrating that they have acquired all of their basic skills -- and, the school hopes, a great deal more besides. Most of the students do pass the exams, even though a few do not pass them all.

And since students must go to school to learn all of the things they need to learn, the school operates a school within a school, called the City School Academy. These are the more or less regular classes that are conducted during most of the morning hours. But these classes aren't free -- every student has to pay tuition out of the money he or she earns by holding jobs in the rest of the micro-society. These classes (and the necessary tuition payments) are required of all students, up to the point of passing the competency exam.

Once the exam in a particular subject is passed, students are able and qualified to move on to real working jobs in the micro-society where the skills acquired in the Academy classes are practiced and put to use, thus (in theory, at least) cementing the learning and promoting the acquisition of more complex skills.

In Norm Charette's City School Academy intermediate cluster "economics" class, one of the walls bears an elaborate, student-made bar graph labeled "Intermediate Cluster Money Supply." Week by week the growth or decline of the cluster's total income of Mogans -- earned income, savings, etc. -- is calculated and put on the chart. A separate bar next to each income bar calculates the cluster's expenses -- taxes, tuition, purchases, etc. The difference between the two bars is the cluster's net reserves.

As I slip into the room, Charette and the class of mostly fourth graders are using the bar graph to work on common business problem, which also happens to involve multiplication and long division.

"What if," says Charette, "we wanted to buy 86 spice ropes (a decorative, scented product manufactured by one of the cluster's businesses)? What do we first need to know?"

A student pops up with "How much a spice rope costs!"

"Right," says Charette. "How much does one cost?"

Another student supplies the answer: "75 Mogans."

"Okay," says Charette, "what do we need to do to find out what our 86 spice ropes are going to cost us?"

"Multiply," comes the answer.

"Right again," says Charette, "so let's do it."

All hands -- or at least most hands -- settle down with pencils and paper to work the problem out. After a few minutes, one student sings out, "6,450!"

"That sounds right to me," says Charette. "Does everyone agree?" Most of them do. "Now, how many Mogans do we have altogether as a cluster?"

A student goes to bar graph and calls out, "15,000!"

"O.K.," says Charette, "if we spent 6,450 Mogans on spice ropes, how much would we have left over?" More pencils scratching on paper. "8,550," says one student.

"O.K., if we wanted to put all of that money into spice ropes, how much would each of us have to pay?" Charette counts the number of students in the class. "There are 28 of us, so how much would each of us have to pay?"

At this point, realizing that what we have here is a problem in long division, I get my own pencil and paper going. My answer, speedily arrived at by dividing 28 into 8,550, is 351. After considerable effort, several members of the class are ready with their answers. "305," says one student. Poor guy, I think.

"That's right," says Charette. I check my figures, only to find that I could hardly have been more mistaken.

* *

The City School Legislature is called to order at 2 p.m. on a Monday afternoon by Maria Dixon, an eighth grader, the school's elected president and the Legislature's presiding officer.

The school's governing body, all 28 members elected by their respective classes running from grade 2 on up, has been wrestling for the past several weeks with a major financial crisis. The government had run out of money, and the government employees, from Maria on down, had not been paid for five weeks. This created an enormous deficit, since the employees were not able to pay their taxes unless they also happened to have another job.

One reason the budget got out of control was a decision the Legislature made several weeks ago aimed at solving the "welfare" problem -- a decision to fund a student loan program. This was deemed necessary because a handful of the school's students -- about 15 to 18 in each of the school's three "strands" of publishing, economy and government -- have been unable to pass their competency exams. They have therefore not been able to get paying jobs. Citizens without paying jobs, the government found, don't pay taxes.

One solution put forward was a straight welfare program. The government would pay all of the living expenses of these students until they passed their exams. Members rejected this solution on the grounds that "the students would lose their motivation to pass the exam if they were paid by the government. A second possibility considered and rejected was a "workfare" or public works approach under which the students would work at various clean-up jobs around the school to earn at least a minimum salary while working to pass their exams. The Legislature rejected this idea because the members felt such

make-work would not allow the students time to study for their exams.

The third possibility -- and the one finally accepted -- was a student loan program. The government would lend the students the money to pay their living and tutoring expenses until the next testing period in February. The students would then have to pay back their loans out of the income earned when they passed the exams and were able to get jobs. The faster they acquired the skills necessary to pass the exams, the faster they could get jobs and the less money they would have to pay back. The Legislature thought such a system would provide just the right amount of carrot/stick motivation.

The decision on the student loan program had immediate consequences: money was needed to fund it, money that was not in the government's original budget. Already though, the Legislature was in the midst of a fiscal crisis: government workers were picketing outside and threatening to strike.

The representatives were thus faced with a dilemma of no small proportions. They could raise taxes (which many had pledged to lower when they ran for election). Or they could cut government programs and salaries and not institute the loan program. After painful deliberation, the legislature passed a budget that lowered government salaries and limited the loan program to only four weeks while maintaining a tax rate of twelve Mogs a week.

That decision left the short-term problem of producing enough immediately available money to pay the government workers (including back pay) and the long term problem of funding a larger budget.

This afternoon's session has concentrated on solutions to the two problems. One motion authorizes the government to borrow 4,500 Mogans to pay the government workers so they could pay their taxes. Another proposes a corporation tax on the micro-society businesses to help fund the new budget.

After considerable wrangling over which bank to go to for the loan (and choosing the bank offering the lowest interest rate), the group passes the bank loan motion. Time, however, runs out on the corporation tax proposal, which is put off until next session.

To an outside observer who had just that morning been reading the news of the latest Congressional budget wranglings in Washington, the events taking place on the first floor of the old trade school building in Lowell exuded an aura of authenticity that would have been hard to imagine rising from the dry pages of the typical grade school social studies textbook.

* * *

On a Tuesday afternoon, the senior cluster court is in session. The school is divided into three clusters -- a primary cluster (kindergarten through grade 2), an intermediate cluster (grades 3 through 5) and a senior cluster (grades 6 through 8). Each cluster has its own form of local self-government, including

electing its representatives to the Legislature and having its own municipal court (a Supreme Court is convened for especially difficult appeal(s)).

The case before the court this afternoon is being tried -- at the defendant's request -- by a judge rather than by the more usual jury system. The judge is a tow-headed, laid-back eighth grade boy.

The case being heard is complex. It has turned out to be a case in Constitutional law. It all began some time ago with an alleged bank robbery. A senior cluster male student was working in the school office and appeared afterwards with a large roll of crisp, new Mogans. He then turned around and shared his ill -- or well -- gotten gains with two friends.

When finally arrested and charged with robbing the bank, the defendant claimed that he had not stolen the Mogans but had simply found them lying around and -- finders-keepers -- had kept them. The jury found him innocent on the grounds that, yes, finders-keepers was a perfectly legitimate reason for his having the money.

The two friends who had shared in the bonanza, however, made the mistake of selling some of their Mogans for real money -- in one case selling 300 Mogans for \$2. They were caught and hauled into court, charged with illegally possessing and selling Mogans. Their trial is being held at this session.

The prosecution, conducted by two female district attorneys, first establishes that, yes, in fact the transaction of selling

the Mogans had actually taken place. The defense attorney willingly concedes that such is the case. The prosecutors attempt then to establish that a crime has been committed by pointing out that such actions have clearly injured the social and legal fabric of the school.

The defense, on the other hand, rests its case on the simple claim that, although there are micro-society laws against stealing, there is nothing in the City School Constitution or any laws passed by the Legislature forbidding the selling of Mogans for real money.

The judge carefully reads both the Constitution and the laws before rendering his decision to a breathless courtroom. He can, he says, find nothing in the Constitution or the laws defining the selling of Mogans as a crime and therefore is forced to find the defendents innocent. However, he is issuing a strong recommendation that the Legislature pass such a law immediately. (Such a law, I'm told later, was passed shortly thereafter).

The defendents -- having sat through the trial looking bored and playing it cool in the best traditions of B movies -- now leap to their feet with joy and slap each other and their lawyer on the back. They also announce that they are going to file a civil suit against the school (including Principal Weintraub as the school's ultimate source of real legal authority) for false arrest.

Why Parents Might Choose This Kind of School

Parents interested in this kind of public schooling for their children might well be looking for schools that subscribe to an educational philosophy set forth by Jean Piaget, the Swiss developmental psychologist:

"The principle goal of education is to create men who are capable of doing new things, not simply of repeating what other generations have done -- [people] who are creative, inventive, discoverers.

"The second goal of education is to form minds which can be critical, can verify and not accept everything they are offered. The great danger today is of slogans, collective opinions, ready-made trends of thought. We have to be able to resist individually, to criticize, to distinguish between what is proven and what is not. So we need pupils who are active, who learn early to find out by themselves, partly by their own spontaneous activity and partly through materials we set up for them: who learn early to tell what is verifiable and what is simply the first idea to come to them."

In this "developmental" view, then, all normal children are born with the capacity to develop a wide variety of forms of "intelligence". According to the Harvard developmental psychologist Howard Gardner, there are at least six distinct forms of intelligence including:

- verbal (the ability to think and communicate through speaking, reading and writing a human language). This

would include all forms of verbal communication, including the creation of stories, novels, plays, poetry, etc.

- logico-mathematical (the ability to think, communicate, perform tasks and solve problems using numbers and other mathematical symbols)
- kinetic (the ability to think, communicate and to perform tasks through the use of the body and bodily motion) This would include most of the practical and mechanical skills such as carpentry and auto repair and so on but also sports and the dance.
- spatial/visual (the ability to think, perform tasks and solve problems involving visual skills). This would include architecture and the visual arts such as painting, sculpture, etc.
- musical (the ability to think, perform tasks and create using sound, musical scales and notation, etc.)
- personal/social (the ability to understand and be skillful at working with people).

Although the capacity to develop these intelligences is a biological given in all but a few children, these intellectual

capacities will actually be developed (children will become more "intelligent" as they grow older) only if these capacities are carefully nurtured by the child's environment.

And since every child is endowed with a natural curiosity about how the world works and about how and why people behave the way they do, since every child wants to learn and therefore has a built-in desire or initiative to discover and find things out, it is the job of school to encourage and assist children to pursue this natural or "intrinsic" bent for learning and continuous development.

Appropriate schooling can therefore play a major role in assisting each child's development, and inappropriate schooling can depress or even arrest it.

All children -- indeed, all human beings -- acquire the skills and knowledge they need most effectively through their own activity, through exploring their environment, through testing their developing intellectual structures against the realities they encounter in that environment. In this way, they construct in their heads a convincing and workable framework for understanding how the world operates. "To understand", as Piaget says, "is to invent."

School should therefore be a place in which children, guided by knowledgeable and understanding adults, are assisted in this process of exploration, testing and invention.

This requires a school environment in which children are encouraged to exercise their own initiative and their own

responsibility for learning, an environment so arranged and organized by adults that children -- sometimes working alone and sometimes in groups -- can generate most of their own learning activities.

Parents are probably more important to a child's development than any school can be and therefore parents should play a major role in all school activities, including school governance and classroom activities.

What Children Should Learn

In most Option III schools -- as in the three described above -- the general outlines of the kinds of studies and activities children will pursue are determined by the principal, teachers and sometimes the parents of the school.

In almost all of these schools to a greater or lesser degree, however, a great deal of responsibility is given to individual students to decide just when and how they are going to undertake particular activities.

How Children Should Learn and Teachers Should Teach

In most Option III schools, the style of learning and teaching is collaborative, that is, teachers and students will work together to decide what the specific activities for the day or week will be. Students are then expected, under the supervision and guidance of the teacher, to direct many or most of their own activities.

How Schools Should Be Organized and Run

In most Option III schools (including all Montessori schools), children will be grouped "vertically" for most of the time (all primary classes will house kindergarten through grade two or three children, intermediate classes will be made up of grade four through five or six children).

The daily and weekly schedule, while basically determined by teachers with contributions from the students, will allow for constant adjustment and re-adjustment as the needs of individual students and groups of students require. Most of these schools believe it is of utmost importance that, once a student has embarked upon a task or become interested in pursuing a particular topic, that the child is given time to finish studying that topic without interruption.

How Children Should Be Graded

Most Option III schools, while they may conduct more or less regular testing (especially in basic skills) do not issue or record formal grades. Rather, they rely on sometimes lengthy written comments by a student's teacher or teachers describing a child's progress in all areas, including basic skills, social and even moral development. These written comments are sent home to parents at regular intervals.

These schools are, as a general rule, very strong on parent involvement in the education of their children and augment the

written comments with frequent parent/teacher conferences and also encourage parents to visit the school regularly and take part on the learning activities.

Parent Checklist

Parents exploring the possibility of this kind of schooling for their child or children might want to look for and ask the school about the following things:

1. Does the school have a philosophy and an educational approach that stresses not only the learning of basic skills but also the development of every child's intellectual, social and moral powers?
2. Does the school believe in giving each individual student a great deal of responsibility for his or her own learning, allowing and encouraging children to play an active role in making decisions about what will be studied and how such learning will take place?
3. Does the school believe that children will learn most effectively through their own activity, through exercising their own curiosity and initiative in pursuing the studies they have in part selected for themselves? Does the school actively encouraging children to exercise such initiative?

4. Does the curriculum of the school, while aimed at insuring that all children acquire their basic skills, approach the learning of those basic skills and a wide variety of other learning experiences in a way that allows both teachers and students to investigate topics and subject matter that arise spontaneously from day to day?

5. Are the school's classrooms divided up into different areas devoted to different kinds of activities rather than with desks and chairs lined up in rows facing the teacher? Are the classrooms equipped with a wide range of learning materials that children can use on their own, including books, objects to be manipulated, animals, science materials and kits and art materials?

6. Is the school's schedule flexible enough to allow children and teachers to organize their own learning activities and carry them to completion before launching into a new set of activities?

7. Does the school report regularly to parents, most likely through written comments describing each child's progress, on not only basic skills but in all other

aspects of a child's development? Does the school try to arrange regular parent/teacher conferences?

King of Student Possibly Best Suited to This Option

Children who have the following characteristics will most likely find themselves profiting from Option III schooling:

- Children who are intensely curious and who are at home in all sorts of self-initiated projects upon which they can often spend long periods of time without a great deal of supervision.
- Children who are not particularly interested in competing with other children for high grades but who prefer either doing their own work in their own way or working in collaborative groups with other children.
- Children who enjoy and who can flourish in a school atmosphere that is informal and relaxed rather than highly organized and structured.
- Children who like to be involved in making up the rules of behavior and discipline under which they will operate, children who may not take kindly to rules that are simply laid down by adults.

- Children who are able to work and who enjoy working by themselves on their own projects but who also are able to and enjoy working with other children.
- Children who enjoy being able to move around the room and school as their needs dictate, children who may have difficulty sitting in one place and remaining quiet for long periods of time.

Schools With Curricular Specialties

Models: Arts Magnet School, Lowell, MA

Isaac Newton School for Science and Math,
Community District Four, East Harlem,
New York City

Many schools of choice -- including and perhaps especially "magnet" schools -- will offer a curriculum that provides instruction in basic skills and most or all of the traditional curriculum areas but will specialize in one curricular area, such as science and technology, the fine and performing arts, foreign languages (including two-way bilingual schools such as the Rafael Hernandez) or computer science, etc.

However, it bears repeating here that any such school, no matter what its chosen curricular specialty may be, must first and foremost decide what its basic educational philosophy and approach to learning and teaching will be, how the curriculum will be organized and presented to children, how it is going to organize its classrooms, its schedule and how it will grade children and report to parents. No school can function or can continue to function until these basic decisions have been made.

Thus, in a very real sense, a school that wishes to offer a curricular specialty must first decide whether, as a public school of choice, it is going to be an Option I school, an Option II school or an Option III school. For example, The Isaac Newton School for Science and Math, described briefly below, is organized and operated as an Option I school, while Lowell's Arts Magnet is essentially an Option II school.

Once this basic set of decisions has been made, the planners of the school and the school's staff can begin making the next set of decisions -- how the school's curricular speciality will

fit into the school's overall philosophy and organization and how the specialization will be carried out.

Such schools also must wrestle with the problem of whether they are going to be selective in their admissions. In many specialized high schools, including the famous Bronx High School of Science and the High School of Music and Art in New York City, students must pass a test or otherwise display some marked talent in the field in which the school specializes. Students must make a special application to be admitted to the school and are then "selected" on the basis of the tests or their demonstrated ability in the special field.

Some elementary and middle schools of choice are also selective in their admissions, either in terms of a specified interest and record of achievement in the school's specialty or of a minimum record of achievement in basic skills. Isaac Newton is an example of this.

Other schools, such as the Arts Magnet in Lowell, are "non-selective" schools that do not require any tests or other special criteria. Any student who expresses an interest in attending may do so, providing there is room and certain minority/majority enrollment restrictions are met.

Finally, of course, the basic question that such schools face is whether, in order to find the time necessary for such specialization in an already crowded school day, the school must devote less time to some other part or parts of the curriculum? In order to specialize in the arts, for instance, does some other

subject have to be slighted? Or is it possible to do both things at the same time, to combine the teaching of all of the subjects in the established curriculum with the teaching of the school's specialty? This approach is called "infusion," or the direct inclusion of curricular material relating, say, to science, into the curricular material (and therefore the teaching) of such subjects as language arts, mathematics and social studies.

The following are examples of these two approaches.

ISAAC NEWTON SCHOOL FOR SCIENCE AND MATH
COMMUNITY SCHOOL DISTRICT FOUR, EAST HARLEM, NEW YORK CITY

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The Isaac Newton School for Science and Math is a huge brick and stone building sitting on an asphalt covered lot overlooking the East River on the very fringe of the east side of the East Harlem section of New York City.

This forbidding monolith was until recently the home of Benjamin Franklin High School, one of the city's "zoned" or neighborhood high schools and considered to be one of the city's worst. Ben Franklin was closed down several years ago, and the building now houses three distinct schools -- Isaac Newton, the River East Elementary School (another of District Four's "alternative concept" schools, this one devoted to science and math from early childhood through grade six) and the Manhattan Center for Math and Science, one of the city's speciality high schools. Thus the over-all Manhattan Center provides concentrated math and science learning from early childhood through grade twelve.

Isaac Newton, is a small school of 240 students in grades 7 and 8, contained within the north wing of the building's second floor. The school's space is rows of perfectly typical, self-contained classrooms marching in orderly fashion down tiled corridors. Most of the classrooms contain the usual moveable desks and chairs, but in several rooms there are still the old-fashioned combination desks (with ink wells) and chairs all lined up in strict rows and screwed to the floor.

Newton is a highly academic "selective" school, that is, in order to get in a student must be reading two years above grade

level, must have a strong "character" recommendation from his or her sixth grade teacher and must pass an examination. Both the student and his or her parents must demonstrate a commitment to the school's rigorous academic program and some degree of genuine interest and accomplishment in science and math. About 400 to 500 students apply for Newton each year, but only 120 are accepted.

Since, in a sense, the students at Newton are the cream of East Harlem's academic crop, they are expected to do well and go on to academic successes. Almost all of them do. About 35% of the graduates are admitted to such highly selective high schools as Bronx High School of Science, another 30% are admitted to the Manhattan Center next door, and another 5% to private schools.

The school's director is Leonard Bernstein, a tall, compact man with a crew cut of white hair. He was a teacher of science and math for 16 years in a junior high in neighboring District Five and has now been a New York City teacher for the past 26 years. Bernstein is also a well-known author of textbooks, a curriculum developer and a consultant to many school districts around the country. There is also a rumor that in his spare moments he conducts symphony orchestras, but that, I'm told, is the other Leonard Bernstein.

"When I was teaching in District Five," Bernstein says, "our kids were almost entirely low-level, disadvantaged children, just like the kids here in District Four. But there was always a handful of very bright kids who got lost in the shuffle of the

big junior highs. There was nothing being done for them in those big schools. So one day I came over here to District Four and talked with Anthony Alvarado who was the district superintendent here [and who later became chancellor of the entire school system].

"I told him I wanted to start a school for kids who were gifted in science and math. He said 'Great!' and wangled my transfer to this district for the 1980-81 school year. I spent six months designing the school, the curriculum and recruiting teachers who, of course, are the key to everything.

"For instance, I had heard about a wonderful computer teacher in a junior high in Queens. His name is John Ferro, and I went to visit him and told him about the school and what he could do in it. He decided to come, and he has turned out to be a real genius -- the most unselfish, giving individual I've ever known. But I had that kind of latitude with picking all of the teachers. I didn't have to pay attention to seniority or union rules or anything like that. If you are going to do what you have to do in a school like this, you can't be selfish or put yourself or the UFT contract above the interests of the kids."

The curriculum at Issac Newton is very traditional and the academic expectations high. Every student takes the regular junior high program of English, a foreign language, social studies, mathematics and science plus special courses in computer science, basic laboratory techniques, mechanical drawing and

advanced math for those interested (virtually all students take ninth grade math in their eighth grade year).

In order to have the time to concentrate on the math and science courses, the school offers no music or art. "Students interested in those subjects," says Bernstein, "have schools here in the district that concentrate on those subjects. What we try to do here is not to teach everything but to teach what we teach and teach it well. And nobody -- not the State Department of Education or the district office hassles us because we do things and teach what and how we believe is best.

"What we are trying to do here, the basic aim of this school," Bernstein continues. "is to get kids to think for themselves and to give them the equipment to do that. Just learning facts is not learning. Learning is learning how to understand basic principles and then use them to solve problems. Facts you can forget and forget easily. The application of a principle you never forget."

After Bernstein developed the school's curriculum and recruited the initial crew of teachers, the school opened in September 1981, with 67 seventh grade students and five teachers, including Bernstein. The school was an instant success, added an eighth grade the next year and three years ago moved into its present location in the old Ben Franklin.

* * *

In John Ferro's seventh grade computer science class, the students are being introduced to the basic principles of computer

programming. None of the students in Ferro's class are the least bit hesitant to venture into programming men and women in Ferro's class. Perhaps this is because Ferro is starting at ground zero, right where they are. Although the students are sitting at two rows of desks with each desk having a computer sitting on it, the machines are turned off and are not to be used in this lesson.

Rather, Ferro -- a lively, bearded man in his thirties -- has in previous classes used the device of asking the students how they would go about planning a trip from East Harlem to San Francisco. The students have apparently said that the first thing they would do is to get themselves a map. Ferro tells me that he then asked them, "What kind of map? A map of Kansas City, Missouri?" No, the students answered, a map of the whole United States, one that included both New York City and California.

And then what? Well, the students decided that in order to make the trip they would have to map out a very precise route from East 116th Street in New York City to San Francisco. Why? Because if they didn't, if they took a wrong turn in Kansas City, they would end up in Texas rather than California.

Aha!, says Ferro, now they are getting the basic idea of programming. A program is nothing more than a very carefully laid out route for the computer to follow, a series of instructions telling a not too intelligent piece of hardware the exact steps to follow in solving a problem (such as the "problem" of how to get from New York to San Francisco).

So, Ferro starts out this class with a simple problem all of the students appear to be familiar with: how to convert temperature readings from Farenheit to centigrade or vice versa and how then to tell the computer (or how to write a program instructing the computer) how to solve the problem. This requires converting the problem into a formula that contains within itself all of the necessary information the computer will need in order to solve the problem. It must also contain the desired final destination (i.e., the solution to the problem).

"Now," says Ferro, standing at the head of the class and using an overhead projector to write with, "what do we do first?" Several of the students makes moves that suggest they are about to turn their computers on and get to work.

"Whoa!", says Ferro. "That is exactly what we don't do. You don't even know yet what you want the machine to do. So what do we do as our very first step?"

"We have to analyze the problem!" says one attentive young man.

"Right," says Ferro, "and how do we begin to do that?"

"We write out the formula!", says another student.

"Right," says Ferro. And, with a bit of coaching from him, the class arrives at several different ways the formula could be phrased:

$$C = 5/9 (F - 32) \quad F = 9/5 (C + 32) \quad F = (C \times 9/5) + 32$$

$$F = 1.8C + 32$$

"O.K.," says Ferro, "What next?"

"Put it on the computer!"

Ferro makes a face that exudes disgust. "No, No, No! Pretend you are on a desert island and you can only write in the sand. Remember, the whole thing is, can you do it yourself? Because if you can't do it yourself, you're not going to be able to get the machine to do it. You've got to learn to do this step by step. So what I think we'd better do now -- or at least what I always do -- is to test my formula and make sure it is right." He and the class proceed to do just that by inserting the value of the boiling point of water (100 degrees centigrade) for the C in the formula and coming up with 212 degrees Fahrenheit.

"Now that I'm confident my formula is correct," says Ferro, "what do we do next in our analysis?"

"We make a flow chart?"

"Right," says Ferro, "But what does that mean?"

No one seems quite sure.

"What it means," says Ferro, "is that we break the analysis down into its logical steps -- what, in order to solve the problem, do we have to do in logical order. And then we put that into a flow chart."

He and the class together proceed to draw the following flow chart on the overhead projector's screen:

```
Start
Input C
F = 1.86 C = 32
Print F
```

End

"Now," says Ferro, "we're ready to write the program. Do we need the computer yet?"

"Sure!"

"No! We're still in the thinking stage. Normal people like us have to think before we open our mouths. So we'll write this out on paper, too. What we have to do now is to translate the flow chart into the Basic language so that then perhaps we'll know what to type into the computer and tell it what to do. And here's where we have to worry about every single detail, because if we miss one little detail, that's like taking a wrong turn at Kansas City."

Step by step, using the overhead projector, Ferro leads them through writing the program. At every step he makes the students tell him what the step should be, explain why that particular step is necessary and what would happen if the step was left out. Eventually, as the end of the class period nears, Ferro and the students have come up with the following set of instructions (a genuine program) telling the computer how to solve the problem of converting centigrade to Farenheit and back again:

```
100 Input "Input Centigrade"  
120 Let F=1.86*C+32  
140 Print "Farenheit=";F  
160 End
```

"There now," says Ferro, as the final period bell rings, "isn't that beautiful? Remember, you can write the best computer program in the world, but if nobody can understand it, if nobody can appreciate it, then it's useless. You've got to write programs for people."

ARTS MAGNET SCHOOL

LOWELL, MA

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"It doesn't have a name yet, but it's about Xavier, this rich guy whose got three different personalities. He lives in Switzerland, but his parents were killed in an automobile accident. Up to the age of thirteen, he's Xavier. Then he becomes Richard. And after that he invents Adolph."

"It" is a novel that is being written by the entire class in Jim Neary's eighth grade English class at the Arts Magnet School in Lowell, Massachusetts where writing and publishing original works are part of the attempt to teach the basic skills through the arts.

Here students might also apply math principles to building sets for the schools theatrical company, learn about human anatomy in music class, or master the alphabet artistically with crayons and paper at hand. The intent is not to train budding professional artists, but to use the arts as a vehicle for effective and equitable education. As one teacher says, "I think that here the students learn to appreciate the arts, appreciate each other and to respect each other's differences and talents.

In Jim Neary's eighth grade English class, three members of a team writing the last chapter of the class novel are wrestling with the question of how to kill off Xavier, the book's protagonist. The entire class has been divided into such three member teams, each writing one of the book's chapters. The whole class has worked out the plot's general outline and has planned to end with Xavier's death at the age of 43. Each team is given six years of Xavier's life to write about while keeping

faithfully to the plot. The team members do most of the writing at home at night, then bring the results in the next day and compare what they have written -- as well as to make sure that one of the other teams has not written something that will "mess up what we were planning to do."

The final chapter team now faces a dilemma: since none of the other characters are supposed to know that Xavier is also Richard and Adolph, there is a slight problem of how all three are to be killed off while preserving the secret of Xavier's multiple personalities.

The team has come up with what strikes me as an ingenious and creative solution. Three people will be seen entering a closed-off room -- Xavier, Richard and Adolph. Three shots will ring out. When the other characters burst into the room, however, there is only one body, that of Xavier.

One of the other loose ends that has to be tied up is how to dispose of Imogene Shepherd, the novel's heroine, since it has been decreed that in the end everybody in the book gets killed off. The solution that the team is toying with is the possibility of Imogene being buried alive in the cellar, bricked up behind a wall. This is reminiscent of a story called "The Cask of Amontillado" by Edgar Allan Poe. Is that where they got the idea? No way, it turns out. They are borrowing the notion from an episode of the television show "Riptide".

When completed, says Neary, the novel in its final form will be typed into the school's computer, printed out and Xeroxed for

"publication." "Actually," says Neary with a laugh, "I'm not sure I want to have anything to do with this production. There must be at least one murder or killing on every page. But then everyone dies at the end of Hamlet, too, so maybe I shouldn't worry too much. But I am attempting to prevail upon them to limit some of the violence, such as getting them to let Imogene survive. And I hope that by writing a novel, they will begin to get some real notions about how to solve problems and make decisions, how to cooperate in a group and what their place is or could be in the writing process."

* * *

In the combined kindergarten/first grade class area, the class's teacher, Deborah Tucke Dupuis, is holding up a large piece of white poster paper with the outline of a heart drawn on it in red Magic Marker. In the middle of the heart is the letter "t."

"Today," says Dupuis to the assembled mass of eager faces, "we're going to make our own Valentines. Each one of you is going to get one of these posters with your very own letter in the middle. When you get your Valentine, I want you to decorate yours with four pictures of things that begin with your letter, two on this side of the Valentine and two on this side, but all inside the big heart. Now I'm only going to say this once" --

there has been great bustle and noise at the prospect -- "quiet people and good listeners are going to get their hearts first."

Dupuis moves around the room passing out a poster to each child. Johanna, a brunette first grader dressed in a red shirt and Oshkosh coveralls, has the letter "L" in the middle of her heart and sets to work immediately with her box of crayons. At first it is difficult to figure out exactly what she is drawing, but rather quickly her first picture turns out to be a very expressive lion. This is quickly followed by a bright yellow lemon, a brown lamp and a small yellow lamb. Dupuis, who has been moving about the room offering help and encouragement, comes by and says "Very good, Johanna." Johanna smiles triumphantly.

* * *

As Peter Downing, the principal of the Arts Magnet puts it, "The two things you saw being done -- the novel being written in Jim Neary's class and the Valentines in Debbie Dupuis' class are just two examples of how this school goes about the job of trying to integrate the teaching of the arts and all of the basic skills and other subject matter.

"I don't know," he adds with a smile, "whether it should be called teaching the basics through the arts or teaching the arts through the basics or just teaching them both together, but that's the way we try to do it. We think both things are important. Because you just can't do a lot of the arts if you

don't have the basics -- you can't write a play or act in it if you can't read, you can't build a set if you can't measure and do math -- we really stress the basics in the first three grades.

"As the children go up in the grades, they do more arts and the integration of the arts and basic skills becomes much easier. We do a lot of production work here. Sixth, seventh and eighth graders -- with considerable help from the teachers and a lot of other volunteer adults -- help write and produce their own plays and musicals. Last year and this year we have done a major original musical production in the spring -- it's the focus of the whole year's work. The students help write the book, they help design the sets and costumes and build the sets. They are the actors, the stage managers."

Or take another example from the same school. The "art room" in which Dan Gaudette's art classes are held is actually only a small part of the larger cafeteria space, a section somewhat cordoned off from the rest of the school by six foot tall metal cabinets. The sides of these cabinets -- and the two full length walls that make up part of the room -- are covered with student art work.

About 20 "intermediate" students, mostly sixth graders, are industriously working in Gaudette's art room. They are each individually planning out on paper a line and shape design that they will later enlarge into a painting.

"What we are working on here," says Gaudette, wiping his hands on his plastic apron, "is proportion. They are first

working out on these small pieces of paper the design they will use when they do their painting. But when they start that process of translating this small design into a large painting, they have to wrestle with how to take something small and make it proportionately larger. That is not only an art problem. It's also a mathematical problem. So they have to work on that, too."

He walks over to a model sitting on a table beside his desk. It looks like the inside of a medieval castle. "This is also a similiar problem. This is a model of the set for our spring production, 'King Didrick's Will.' The students -- with some help from me -- made this model as an exact replica of the stage at Mahoney Hall where the production will actually take place. They had to take all of the measurements of that stage and reduce them -- precisely -- to the dimensions of this model. They also had to work out and show how the scenery will change for all of the different scenes. Pretty soon now we'll start building and painting the actual scenery itself."

He keeps a watchful eye on his busy charges, frequently answering pleas for help. "What I think we're trying to do here in the visual arts program is to teach the basic skills of perception. We want to strngthen their senses, build up their visual perception muscles, so to speak. We want them actually to see things in the environment they may have never really seen before. We want them to see and construct the visual world in new and wonderful ways.

"We also want them to develop self-confidence in their own ability to create. When they come here they tend to think that everything has to be perfect and perfectly representational, an exact 'right' copy of what's out there. We try to wean them away from that, to give them the confidence to make their own interpretations, to express their own vision.

"When they first get here, many of them don't know that they have ability and talent in the arts. Some of them discover these abilities slowly, but some of them -- and many of the best of these are not good at conventional academic subjects -- seem to grasp what it's all about instantly, as if they came with a blueprint already in their heads, some kind of strange intelligence that enables them to understand and create almost without thinking about it. But in general, the school provides so many opportunities for creativity that almost every student finds something he or she is good at. The real problem is channeling all of their energy into the creation of things they find satisfying and beautiful."

Why Parents Might Choose This Kind of School

Parents are attracted to specialized schooling for their child or children for a number of reasons, but in most cases it is because a child has evidenced a strong interest and perhaps even an unusual talent in the field in which the school specializes.

On the other hand, it is not unheard of for parents to select such a school because of its general atmosphere, its reputation for being a "good" school or because they feel it is important for children to be well-grounded in the arts, the sciences, computers or whatever the school's specialization is.

In any or either case, the first thing a parent should perhaps do is to make sure that the school's basic approach to teaching and learning fits the child in question. That is, will the child be most comfortable and successful in an Option I, Option II or Option III school and which kind of school is the school that teaches the speciality the parent may be interested in having for his or her child?

If the basic approach is deemed suitable and the specialty is one in which the child is interested or shows talent, then the school is most likely a good choice.

Parent Checklist

Parents interested in selecting a school with a curricular specialization might therefore ask the school (and themselves) the following questions:

- Does the school offer the kind of schooling (Option I, II or III) that you feel will be best for this child?
- Does the school offer the kind of curriculum specialization that the you feel you want for your child

or children, a specialization that will develop your child's talents in that particular subject area?

- Is the specialized subject matter offered by the school added onto the regular curriculum? Or is the specialized subject matter infused into the entire curriculum?

Kind of Student Best Suited to These Kinds of Specialized Schools

The type of student who will most profit from and probably succeed best in these kinds of specialized schools are most likely to be children who in their activities at home and/or in school have demonstrated an interest in and/or an aptitude for the particular subject area in which the school specializes. It should be remembered here that in these specialized schools children often discover talents and interests they did not know they had before attending the school.

7.

A Further Dimension of Difference: The Involvement of Parents

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In addition to the basic differences in educational philosophy and school organization that distinguish the three options described above, there is another realm in which individual schools of choice can and do differ: the degree to which parents are involved in the day-to-day operations of a school and in the actual process of making the important decisions about how the school will be run.

In one sense, it appears to be a fact that all schools of choice are strong on the involvement of parents. That is, the fact that parents have been able to choose the school they want for their children greatly increases the desire of parents to be involved, and such increased involvement is very much appreciated and encouraged by most schools of choice.

Also, the degree to which parents are or are not involved in the operations of a school does not appear to depend upon the particular educational option any particular school choice chooses to be. Very traditional, back to basics Option I schools, for instance, can have a high degree of parental involvement while non-traditional Option III schools can have very little.

While keeping this in mind, however, it is probably accurate to say that, in general, it is the Option III schools that are more likely to advocate and practice the more complicated forms of parent involvement, such as shared governance.

In general, then, the degree of parent involvement in schools of choice (or any kind of school, for that matter) breaks down into the following general categories:

Minimal Involvement

In some schools, the role of parents is carefully defined and limited by the school and has mainly to do with encouraging parents to support and re-inforce the established aims of the school when dealing with their children.

Parents are expected to convey to their children the importance of good behavior in school and the importance of obeying the rules and being respectful to teachers, the importance of working hard and doing everything they can to succeed in school. Parents are also expected to supervise homework and make sure that it is done in a proper and timely fashion. Parents at Isaac Newton would be a good example of this degree of parent involvement.

Parents are also expected in many cases to become active members of a parents association or a parent/teacher group and to support the school through fund-raising efforts. They are also expected to be available for parent/teacher conferences should the necessity for such conferences arise.

Significant Involvement

In many -- and probably most -- schools of choice, the role of parents is somewhat broader. This is true even in Option 1 schools that espouse a very traditional educational philosophy.

At the Nathan Hale back to basics school in Boston, for instance, parental involvement has, according to the parents, very much been a process that has evolved from minimal to significant.

One of those parents is Barbara Kibler, a resident of the Roslindale section of the city whose children attended the Hale and who is now the school's half-time parent coordinator.

"I came here," she says, "five years ago as a parent of twins, a boy and a girl, both in kindergarten. I have not lived in Boston all my life -- I'm from Tennessee -- but my husband was born and brought up here. We have three children, and it was impossible for us to send them to private or parochial school, which was what most people in Roslindale were doing at that time [as a result of the desegregation problems the school system had experienced]. This was five years ago, 1980. We had to make a decision. We started looking at private schools, and we knew we couldn't afford it, so we thought we'd try the public schools.

"I visited all of the nine magnet elementary schools. You really didn't know back then whether you'd be able to get into a magnet school or not. My children were geocoded into a non-magnet school in Roxbury, but I hadn't heard a lot of real great things about it. So I was very nervous. I looked at all of the magnets, including the Hale. I knew nothing about this school,

no one I knew had children here, but when I visited it I was very much impressed with its kindergarten.

"So I came here first as a parent. I picked it because I liked the smallness of the school, and I knew that I personally wanted to be able to be involved in the school. And the school worked out well for both my children. And I think it works well for all of the children here -- white, black, everyone.

"And one reason is the involvement of parents -- we have a strong parent group here. And that's partly due to having a parent coordinator. I think every school should have a parent coordinator. It gives parents someone they can talk to if they need help, someone for parents to rally around, someone to give direction and help to parents.

"Over the past few years there's been a real change here in the relation between parents and teachers. When I first came here there was a really strong feeling on the part of teachers that the classroom doors should be closed. Teachers felt threatened by having parents in the building. Now all that's changed. Teachers are really excited by having parents around, and parents are much more comfortable about being here. It's been an educational process on both sides. Teachers began to understand that parents weren't here just to criticize but to help. Now we have a real partnership.

"Now parents and teachers and administrators can sit down and talk to each other and plan. For instance, there's our Bank of Boston computer project. Last year the parents were upset

about having a lot of computers here and not doing much about it. The teachers were reluctant to use them. So the parents, the teachers, and Pat Lochiatto, our principal, all got together and wrote a proposal. The parents did the research, and everyone got excited. And we got a \$5,000 grant from the bank, last year mostly to train teachers, this year to train parents to be part-time computer tutors working in the classrooms."

Shared Governance

Other schools of choice, for the most part Option III schools, have moved several steps beyond even these "significant" forms of parental involvement and have developed genuine systems of "shared governance" in which parents have a strong voice in the major decisions affecting the school's life.

At the Graham and Parks Alternative Public School in Cambridge, Massachusetts, for instance, the school believes in and practices a system of "shared governance" or "shared decision-making" in which all major decisions -- what the school will be like, how it will run, who the teaching staff will be -- are all made by parents, teachers and principal together.

This approach to governance was built into the school right from the start since, after all, this was a school started not by the school system but by a group of parents who believed that it was the duty of their local public school system to provide all parents with the different kinds of schooling parents wanted.

So Graham and Parks is governed by what used to be called a policy board and is now called a steering committee made up of five parents elected by the parents, five teachers elected by the teachers, the principal and the parent coordinator.

As Leonard Solo, the school's principal, describes the process, "the twelve of us make the decisions about every aspect of the school. Nothing happens of policy importance unless it has been decided by the committee. Each of us has one vote, and nobody overrides anybody on that. The decisions of the committee are binding on everyone, including me.

"The committee has proliferated several sub-committees for special purposes -- buildings and grounds, fund raising, curriculum and most importantly the hiring of staff. When a position opens up in the school, the hiring committee interviews the applicants. The committee is made up half of parents and half of staff members, all carefully mixed by race, sex and socioeconomic background. I'm on the committee, too. In the old days, we would make our selection and send one name to the superintendent who would make the recommendation to the School Committee. Now we have to send three names in order of our preference -- and then lobby for our first choice."

Dr. Ann Bolger, the school's full-time parent coordinator, sums it up, "I think that the combination of choice and shared governance gives parents a much greater sense that they have power over what's going to happen to their children, and I think that is really good."

Or in another case, that of the City Magnet School in Lowell, the school's principal, Robert Weintraub, puts it this way:

"There is another thing about this school that I think is just as important as the micro-society, and sometimes I think it is more important. And that is the process of participation and the sense of ownership that it engenders. The kids feel ownership and excitement because they are responsible for running their own lives and their own societies. The teachers and the parents also have it.

"In fact, what we have here amounts to what should be called 'shared governance.' For instance, many of the major decisions about what's going to happen here are made not by me alone but by the various participatory structures we've developed, by the teachers in their weekly workshops, the parents at PTO officer meetings, the children in their Legislature and all of these participants together in what we call our Executive Council. I chair the council, but that's all. It's not only lonely but stupid for a principal to try to make all the decisions. The best decisions are made with the people who are affected by those decisions.

"And we really do try very hard to get all of our parents involved. Not long ago, one of our three Hispanic Executive Council members, Anna Baez, said at a parents organization meeting that our Hispanic parents were not participating as much as we hoped they would (after all they are 30% of our population)

and that this was happening for a variety of reasons, including the fact that they felt inadequate because of their lack of English language skills.

"And so what we all decided to do was to set up a separate Hispanic parents group where Spanish is the only language used (and I made a commitment to learn Spanish). So we sent a questionnaire to all our Hispanic parents, asking them if they wanted such a group. They did, so now we have one. I'm just citing this as an example of the process that we've always tried to have here, where you have everybody sitting down and talking and hopefully respected for their opinions and listened to by everybody else.

"And this kind of participation, including the Executive Council, is built right into the school's Constitution. This school is designed to be a democratic, participatory institution. We could have designed a typical autocratic school. Adults can impose their will on kids very easily, schools can impose their will on parents very easily, and most of them do both. Here we could have created a kind of fake democracy. We could have created a constitution that gave kids and the parents very little real power or responsibility. We didn't do that. And we've gotten more democratic over the years."

ABOUT THE INSTITUTE FOR RESPONSIVE EDUCATION

The series of publications, "Parent Choice and the Public Schools," of which this volume is a part, has been developed and published by the Institute for Responsive Education (IRE).

IRE is a Boston-based national, non-profit research and advocacy organization with a 14 year history of work designed to make schools more responsive to citizen and parent involvement and concerns. Although private and independent, IRE is housed at Boston University, where its President and founder, Don Davies, formerly Deputy Commissioner in the United States Office of Education, is now Professor in the School of Education. All of IRE's work centers on two premises: that parent and citizen participation is an essential ingredient in school improvement and that citizen access to information is indispensable for efficient participation.

IRE conducts several other projects focusing on parent choice. The magazine Equity and Choice (three times a year) reports on much of this work. Working closely with school districts around the country, IRE provides technical assistance and consulting aimed at promoting parental choice within public school systems. Participating school systems and interested others have also joined a network, the National Partnership for Parent Choice in the Public Schools, to share their experiences and insights. For information on any of these activities, contact:

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