The report describes a study which looked at two-way interactions among teachers and severely physically disabled and nondisabled children who were followed from kindergarten through first grade. Seven of the children had cerebral palsy and one a muscular disorder. Data collection included direct classroom observation on 74 days; interviews with administrators, parents, teachers, and aides; and evaluation of such historical documents as newsletters, student progress reports, school handbooks, and student placement forms. The report also provides discussion of social relations inherent in mainstreaming practices; a description of the study school; school structure and function; decision making process (how participants manipulate organizational structure); student placement procedures; educational planning procedures; ongoing institutional support; federal, state, and local contexts; effects of values, resources, and integrative mechanisms on classroom integration; the school as policy director; the case for cooperation; and the district/community as supporters. School systems need to ask the following questions: (1) Does the program provide the widest range of alternatives possible? (2) Is there a balance of alternatives? (3) Do program alternatives and balance of alternatives maximize individual student abilities and minimize differences? (NB)
EFFECTIVENESS INDICATORS FOR POSITIVE INTEGRATION OF POHI (PHYSICALLY AND OTHER HEALTH IMPAIRED) STUDENTS

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THE PROBLEM: UNDERSTANDING SOCIAL RELATIONS INHERENT IN MAINSTREAMING PRACTICES

American society has been a macrocosm of the classrooms in this study since 1975, with the passage of the Education for All Handicapped Children Act (PL94-142). Known as the "Bill of Rights" of handicapped children, this federal law requires that all handicapped children throughout the United States be afforded an "appropriate education" in the "least restrictive environment." An "appropriate education" ideally translates into equality of opportunity and positive social integration of handicapped children with their nonhandicapped peers. The "least restrictive environment" encompasses the ideals of physical accessibility as well as acknowledgment that all bodies and minds must have access to instructional resources that best support the broad array of talents and capabilities represented by the society as a whole.

Federal policy requires changing environments and behaviors that might seem to be the contradictions of American attitudes toward wellness. However, the questions of what constitutes an appropriate education and supportive learning environments are fundamental ones for both the general school population and exceptional students in "special" education. Schools are agencies of socialization, transmitting societal goals and values (Parsons, 1983; Dreeben, 1977; Durkheim, 1971). When a handicapped child enters any classroom, teachers and students have an opportunity to become participants in a process of socialization that improves life chances and
enhances tolerance for diversity needed for a democratic society to carry out its ideals of equal opportunity for all.

Since passage of Public Law 94-142, "mainstreaming" has become widely accepted as the way to meet the goals of appropriate education in least restrictive environments; yet no operational definition of mainstreaming exists (Strain and Kerr, 1981). The most widely accepted conceptual definition follows:

Mainstreaming refers to the temporal, instructional, and social integration of eligible exceptional children with normal peers based on ongoing, individually determined educational planning and program process and required clarification of responsibility among regular and special education administrative, instructional, and supportive personnel. (Kaufman, Gottlieb, Agard, and Kukic, 1975: 73)

This concept of mainstreaming reflects two presuppositions. First is the assumption that certain social benefits will derive from integration. Children with different backgrounds and experiences "will get to know one another better, will learn to get along with each other, and will change the negative attitudes which they have acquired from prejudiced families and communities" (Patchen, 1982: 3). Second, equal opportunity will improve academic achievement for handicapped children and thus lead to improved life chances for these children. Life chances are seen as the "child's future ability as an adult to participate fully in the social, economic, and political life of society" (Levin, 1975: 217).

Normalization of the environment begins with socialization to the value of equal opportunity. Mainstreaming is essentially a program of socialization in which the value of equal opportunity for all children is carried out through the face-to-face interactions involved in schooling experiences. Socialization to the value of equal opportunity must be examined through: 1) the contexts of mainstreaming practices--both
structure and content, 2) the dynamics of interaction among individuals, and 3) the ways in which behavior and attitudes change as new members are accepted into the mainstream of society. The contexts of structure and content include specific ways activities are organized to promote learning as well as expectations for learning specific subject matter. The dynamics of interaction involve role negotiation and strategies for gaining acceptance as an equal and fully participating member of a group. Changes in behavior and attitudes involve expectations for competence that are grounded in first-hand knowledge of individual capabilities rather than in preconceived notions of ability.

Integration of physically handicapped individuals involves adjustments within the entire system of education, including the individual within the classroom as well as within the school and community environments. All aspects of socialization and its processes will have to be accounted for in order to address the central problem: What are the effects of the mainstreaming environment on the conditions needed for handicapped children to socialize on an equal level with their peers?

The shapes of such environments depend upon federal, state, and local institutional decisions, as well as choices made at the school, classroom and individual levels of the environment. For federal, state and local institutions, we need to know the effects of policy mandates and legislative action on mainstreaming in individual schools. Within the school, we need to know more about the ways administrators, teachers and support personnel translate mainstreaming goals into activities of selection, teaching and testing.
This in-depth study of a particular mainstream program tells how one program worked, its process, outcomes, and conditions that promoted positive social integration of physically handicapped students in kindergarten and first grade. Specifically, an examination of school structures and interpersonal relations inherent in mainstreaming provides an understanding of the behaviors, attitudes and conditions that underlie practice, suggesting ways practice may be improved.

MAINSTREAMING AND INTEGRATION

A critical operational result of mainstreaming is integration. A word which since the 1960s has tended to carry heavy emotional values and to have wide varieties of meaning, integration means literally "a process of making whole, of uniting different parts in a totality" (Hegarty, Pocklington, and Lucas, 1984: 14). In special education, the term has been widely used to mean integration of the handicapped, focusing on this ten per cent of the population as if integration were something done to or by the handicapped themselves and not interaction to form a new educational whole. The focus has also been on physical integration or placement of a handicapped child in a regular school. However, physical integration does not in itself lead to desirable social integration and attitudinal shift. Social integration implies re-socialization as children eat, play and share together in organized classroom activities that support the handicapped child's ability to take a place in society comparable to his or her peers.

Labeling, a key feature of a segregative society, condemns a child without possibility for acknowledgment that a child cannot be handicapped
unless professional practices are available to make that judgment, and professional practices are products of institutions that are underpinned by social processes. A label becomes a social fact about a child—"an object with a fixed meaning for the institution, albeit a social product of its own practices" (Mehan, 1981: 407).

A logical extension of this notion of handicap as a social construction is the ideology that special education and regular education are neither dichotomous nor fundamentally different. Both exist to further the education of children, so that:

What is required is that the school adapt its educational provision so as to be able to cater to a wider variety of pupils. This means a highly flexible range of provisions, planned as a whole—since the school is a single entity—but incorporating a multitude of possibilities and not just a simple choice between ordinary and special tracks. Hegarty, Pocklington, and Lucas, 1984: 17).

In this study, the case of physically handicapped children especially brings out the necessity to separate the label from the child. The fact that a child has a physical difference says little about his/her capacity and potential for learning.

PRACTICE AND EMPIRICAL FINDINGS

Study of the effects of mainstreaming exceptional children has a short history in the literature. Much of the research has been devoted to mental retardation, since this group makes up most of the handicapped population. Overall, studies of the effects of mainstreaming are contradictory and inconclusive, because they have focused on attitudes in isolation from behavior, and test scores in isolation from the classroom environment, and on strategies of policy implementation without regard for the processes involved (Randolph and Harrington, 1981; Friedman,
1975; Keogh, 1981; Strain and Kerr, 1981). It is not clear whether attitudes change behavior, or behavior changes attitudes.

The empirical findings in research on mainstreaming practice point to the need for an interactive research model. First, sociometric research findings lack explanatory power regarding patterns of social interaction among children and the processes involved in attitudinal shifts (Voeltz, Johnson & McQuarter, 1983; Friedman, 1975). Second, experimental studies are conducted under carefully controlled instructional conditions. However, "whatever is occurring in the context of a peer interaction may be associated with learning opportunities not present in teacher-pupil interactions" (Brady and Gunter, 1985: 86). Behavioral studies have the capacity to explain links between attitudes and behaviors, but little has been done that focuses on two-way interactions among teachers and disabled and nondisabled children (Ispa & Matz, 1978; Hoggan, 1978; Schifani, 1980).

RESEARCH DESIGN

This study of a mainstream program was carried out using ethnographic methods involved in participant observation. Eight children with physical handicaps were followed through their schooling experiences from kindergarten through first grade. Seven of the children had cerebral palsy and one a muscular disorder. The children ranged from mildly to severely involved.

Data collection was accomplished through systematic direct classroom observation for a total of approximately 160 hours on 74 different days, three mornings a week, from March through November, 1984. Activities covered a wide range of settings--classroom instruction, recess on the
playground, staff meetings, school assemblies, therapy sessions, and special events.

Data also include interview transcripts and historical documents. In-depth taped interviews, averaging an hour in length, were conducted with 17 people: 2 district administrators, 2 parents of nonhandicapped peers, 4 parents of handicapped students, 5 general education teachers, 2 Orthopedically Handicapped Center teachers, and one aide. Historical documents included: newsletters, student progress reports, school handbooks, student placement forms, memorandums at state and district levels of administration, and surveys.

MIDDLEFIELD SCHOOL*: A DESCRIPTION

Located in a city on the west coast of the United States with a population of 52,000, Middlefield Elementary School is a neighborhood school built in 1952. A Center for the Orthopedically Handicapped was added to the site in 1969. Middlefield is one of eleven elementary schools in the district, which encompasses only the city in which it is located.

The elementary school has 14 classrooms, grades kindergarten through sixth. Many classrooms are "mixed" grades. Total enrollment is approximately 350 in the general education complex, and four special day classes in the OH Center with a total of 40 children. Approximately one in ten children at the site is a physically disabled or "exceptional" child.

*The name Middlefield School is a pseudonym, as are the names of the participants in the mainstreaming program that are described here.
Middlefield School receives federal funds from the Elementary and Secondary Education Act, ECIA, Chapter One (Compensatory Education for Educationally Disadvantaged Children) and is therefore designated as a "target school"—a school having a proportionally higher number of children on welfare than other local schools. The school also receives state funds under the School Improvement Program. This program requires an adult-child ratio of 1:10 and parent involvement in the form of a School Site Council. The purpose of both Chapter One and School Improvement funds is to improve basic skills and development in reading, writing, language and math.

The number of staff to support the educational programs for children at Middlefield School is approximately 80. Classroom teachers number 17, resource specialists 13, and classroom aides, 20. There are 2 part-time psychologists, 7 therapists and 9 administrative personnel. The specialists offer direct instructional services ranging from English-as-a-second-language to learning handicapped and perceptual motor skills training. Therapists offer speech and language training, occupational and physical therapy. Staff at the school and OH Center work together cooperatively to mainstream orthopedically handicapped and nonhandicapped students.

Visitors to Middlefield School are an everyday occurrence. Many parents come to make decisions about placement of their children. Professionals come to learn more about mainstreaming practices. All visitors are welcomed and taken in stride by students and faculty alike.

The school staff give a handbook to visitors that includes information about scheduling, the curriculum, the staff, community services, and the
mainstreaming component of the school. The section of this handbook on
mainstreaming is an important introduction to mainstreaming practices at
Middlefield School. The section is titled: LEARNING TOGETHER: SPECIAI
EDUCATION AND GENERAL EDUCATION. The concluding statement is as follows:

...Mainstreaming is more complex than simply having students with
special needs sitting in general education classrooms. It has become
a broader fabric of interwoven exposures and experiences, resting
upon the tested principle that handicapped and nonhandicapped children
have a great deal to offer each other.

The visitors to Middlefield School wend their way through hallways filled
with children from many different ethnic, racial and socio-economic
backgrounds. Children with all different kinds of disabilities intermingle
with their nonhandicapped peers in the lunchroom, on the playground, and
during classroom activities. The disabilities cover the range from
profoundly deaf, legally blind, multiply handicapped in wheelchairs, to
the barely discernable differences of mild hemiplegia and learning
disabilities. Ramps, handrails, special door handles, and specially
designed play equipment are in evidence throughout the school.

Children's art work on the walls and bulletin boards provide further
evidence that mainstreaming does not just mean joint physical occupation
of space at Middlefield School. One bulletin board contains water color
pictures of classmates with the caption, "Room 14 wishes to share with
OH." Another bulletin board contains newspaper clippings about the school.
One such item has the heading, MAINSTREAMING CAN BE A SCARY EXPERIENCE.
Underneath it says, "...but we've found that after a period of transition
and close communication with special education staff, regular teachers
become strong advocates of the process."
Visitors are encouraged to stop and talk with teachers. The kindergarten teacher says, "I came to this school because I wanted to be here. I enjoy teaching children with special backgrounds." The Science teacher says, "Our philosophy is that kids are kids first, disabled second. We expect all the children to do as much for themselves as they can."

SCHOOL STRUCTURE AND FUNCTION

Middlefield School district operates through an organizational structure of school personnel and advisory committees with particular functions and goals. Advisory committees include the School Site Council and Parent Teacher Association (PTA). Both are composed of staff and parents from the General Education Center as well as the OH Center. Historically, both groups have been deeply involved in many facets of the Middlefield School Program. The council is responsible for assessing and planning current school programs. In February of 1984, the Council sent an extensive questionnaire to all parents of children at Middlefield School asking for general impressions of the school program and feedback regarding their own children's specific school experiences. Responses from approximately 70 parents were positive. Regarding general impressions of the school program, parents described school personnel as "open, responsive, accommodating, friendly, caring and helpful." When asked for input that would be helpful regarding the mainstreaming program, specific comments supported the current program and encouraged more participation. Three typical responses were:

It's fantastic! How lucky I feel that my child and other children at Middlefield are so fortunate to have this opportunity.
Marvelous experience for my daughter. When she first came to Middlefield she was afraid of some of the OH kids and their behavior made her extremely uncomfortable. All that is past - she loves to be around the OH Center.

I have always been in favor of it because it helps the other kids to be more tolerant. They can also learn from these children as well as help them.

School personnel at Middlefield are organized into three distinct centers - the General Education Center, OH Center, and Medical Therapy Center. The General Education Center provides instruction for students from kindergarten through sixth grade. The OH Center instructs students from pre-school through secondary levels. The Medical Therapy Center provides physical and occupational therapy to minors throughout the county as well as to OH Center students. Each Center is supervised by a different individual; however, the General Education and OH Centers are both under the auspices of the Middlefield Unified School District. The Medical Therapy Center, although housed in the OH Center wing of the school grounds, is under the auspices of the County Health Department.

The three Centers must work closely together to coordinate services for handicapped children. Scheduling the time individual students spend in each of these center programs is a major concern. Wednesdays are shortened school days so that general education teachers can have released time to plan and coordinate educational instruction for their students. School personnel are generally satisfied with this system; however, it is not without problems. Medical Therapy Center staff are generally not as available as teachers in the other two centers would like them to be for planning and coordination of services.

One of the major problems resides in the structure. The County Health Department, a system external to the school district, selects and supervises
therapists, allowing for little or no internal control. In addition, the Health Department had experienced "serious" budget cuts, preventing therapists from providing adequate staffing for the needs of the school.

DECISION-MAKING PROCESSES: HOW PARTICIPANTS MANIPULATE ORGANIZATIONAL STRUCTURE

The organizational conditions described above constitute only the structure and resources of the program. Individuals in the mainstream program manipulate and use these structures to particular advantages or disadvantages. Decisions to allocate resources are the administrative responsibility of the district personnel and principal. These decisions are made with the input of individual teachers and parents. Three critical areas of decision-making in the school program are: personnel selection and training procedures, students placement procedures, and educational planning and preparation procedures. These must be understood as well as ongoing instructional support required to maintain the program.

Personnel Selection and Training Procedures

The Coordinator of Special Education for Middlefield School District since 1971, in an interview, stated that a program of integration must be "extremely flexible and extremely individually planned. You have to sit down with each individual child and decide how much participation in the general education setting will really be useful for the child. Mainstreaming should be for the good of the child, not for anyone else's feelings of satisfaction."

This statement is supported by her functional responses in concrete situations of choice that the coordinator faced in carrying out her beliefs.
The Coordinator utilized several strategies to insure that the system was flexible and responsive to individual needs. First, she convinced district personnel that hiring of teachers at Middlefield School must be based on the premise: "An assignment [in general education] at Middlefield School means that you are going to participate in the program with physically impaired children." She explained that teachers and principals who had been selected for Middlefield School in the past were not always the most open and supportive of the philosophy of mainstreaming. She recognized that, "while sometimes staff members that were older and set in their ways that had been there a long time would talk about their interest in working with special children, their attitudes and the way that they welcomed the children into their classrooms belied what they were actually saying." This she felt, was "a subtle way that mainstreaming can be sabotaged." Since her tenure as coordinator, she has "encouraged people to leave who didn't fit."

Second, the Coordinator applied for Professional Growth Funds to assist her in providing in-service training that allowed for "more face to face communication" between special education and general education teachers at Middlefield School. This money allowed her to set up meetings between professionals. She also built in social activities to provide staff informal opportunities for sharing and support.

This assertive district coordinator used her influence to hire a school principal who, in turn, strongly affected the system at the school level. Mr. Johnson's personality, style, and commitment to mainstreaming and his impact as an individual role model have been highly influential. In addition, his manipulation of the system and strategies for carrying out
these personal goals at an institutional level had an important impact on
the demand for and success of positive social integration for physically
handicapped students.

At the beginning of the school year 1984-85, a staff meeting attended
by 37 professionals involved in operating the school's programs focused
on three issues Mr. Johnson had proposed in a handout:

1) What are some informal ways that we can share each other's expertise
without adding stress or pressure?

2) The General Education and OH Center are rich resources to each
other. What are some things we can do together to further maximize
mainstreaming and interaction among nondisabled and disabled kids
without increasing job stress?

3) Staff meetings should be professional in-service time where everyone
feels it's productive time spent. What are some areas of focus--
curriculum, development, designing success strategies, etc.--that
could be devoted to staff meetings that would be common to all of us
and that we would profit from professionally?

Staff spent the morning in small groups, in brainstorming sessions
regarding these three issues. At the end of the morning, each group
shared their ideas and a set of goals was developed for the year. Many
of the proposed activities centered around efforts to enhance communication
and interaction between the OH Center and General Education Staff and
students. Some of the suggestions included: 1) using student teachers
so general education teachers could observe and teach in the OH Center,
2) bringing General Education and OH Classes together for certain lessons,
3) establishing Lunchtime picnics together, 4) using some staff meeting
times to deal with mainstreaming issues, 5) using drama and role playing
during class to deal with emotions so children can "see their similarities."
These suggestions are an example of professionals' willingness to provide
opportunities for integration that are flexible, innovative, and an adaptive manipulation of built-in system activities.

Student Placement Procedures

In addition to leadership influences on personnel selection and training, procedures for implementing educational programs are in place. These procedures include both formal mandates and their accompanying documents, and informal ways decisions are made through every day choices of practical action. Many of these decisions are carried out by personnel directly responsible for classroom instruction and supportive services.

The Local Plan for Special Education, February, 1984, spells out in detail such practices as identification, screening, referral and placement of special education students; eligibility criteria and qualifying program procedures; steps required for assessment plans, including individual educational programs; and parents' rights and appeals procedures.

The Local Plan defines Qualifying Program Procedures as follows:

A student shall be assessed by a multidisciplinary team as orthopedically handicapped when a licensed physician, surgeon or nurse practitioner verifies in a written report a diagnosis of impairment in locomotion or motor function which significantly effects educational performance.

Referrals for eligibility may come from teachers, students, parents, agencies, appropriate professional persons, and from other members of the public (Local Plan). The referral is accepted and reviewed by the local school/site administrator, who is responsible for referral and assessment procedures and for due process considerations.

Once a child meets eligibility and qualifying program procedures, the Individualized Education Program Team meets to determine appropriate
placement of the student in a school program. The Local Plan delineates who the team members shall be, their roles and functions, mandated timelines, and specific items to be considered in development and evaluation of instructional and ancillary services. The team reviews all plans at least annually, usually in the spring.

These formal procedures are subject to a significant amount of individual and school site discretion. Guidelines provide only general directives for the process of placement decisions.

Cooperation and communication are essential components upon which the success of formal procedures depends. At Middlefield School, cooperation and communication are dependent on individual initiative and carried out for the most part through informal networks. General education teachers many times felt a need for more communication. One kindergarten teacher's testimony is indicative of this need. When asked in what ways she communicated with Medical Therapy and OH Center Staff, she responded:

There isn't a great deal of communication. I suppose I could if I would request it for a specific purpose. I did occasionally talk with the speech therapist because when Harold was here I was desperate to find some ways, because I felt so badly for him. He wanted so badly to give me a story picture dictation. It would break my heart. And I would desperately try to find a word here and there, but it was very difficult. So I did meet with her and she was working on specific sounds with him and also felt like he should be learning sign language because he will always have a tremendous problem. So I'm sure I could always call a meeting like that. But in truth we haven't done it on a regular basis. I go to IEP meetings and I listen to what everybody else who works with the child has to say and that's good input. And then I describe what I see in the general education setup. But I guess we're all busy.

OH Center teachers responded similarly, citing lack of time for communication to take place as the key problem. Mrs. Temple, a special education teacher, asserts, "I don't get over there [to general education classrooms]. I feel badly, but I have responsibilities here too and it's
really hard for me to get over so I really rely on good communication between the general education teachers and myself."

Communication among school personnel takes place most frequently at several critical junctures in the handicapped children's program: placement decisions, preparation at the beginning of the year, and Individualized Education Planning meetings.

Different teachers have varying views of the amount of control they exercise over placement decisions, or specifically, which handicapped children will be mainstreamed in their classrooms and for what amounts of time as well as with what kinds of support. One general education teacher wishes that she had more input:

We're required to give cards about each child [to Mr. Johnson] with data about how they're doing in math and reading and socially, and their leadership abilities and such, and then a recommendation as to where they be and as to whether they should be separated from any child and whether there are some kids they should stay with. But when you see the class list in September, you think my God how did it happen, because it has no relationship to the input you had been giving.

Other teachers felt that placement decisions should be the responsibility of OH teachers and would talk with them only if in disagreement with the decision. These teachers felt their input was valued and that OH staff was responsive to their opinions.

When asked what role he plays in placement decisions, Mr. Johnson responded, "I play probably a heavier role than the teachers realize. But essentially how it gets done is that there are a lot of people who give input and if the input is conflicting then I make that decision."

Mr. Johnson listens to parents, who sometimes have strong requests for a particular placement, and to teachers' preferences for a particular child. He also tries to distribute them as evenly as possible among classes,
however sometimes, "it makes more sense to cluster them in classes, so that if you have someone like Mark and Adam who are so severely disabled, so dependent upon adult help, that those two little guys could get more mileage by being in the same class because there would be an aide with them for more time and could work with the two of them together."

Placement decisions, on the whole are based on individual preferences that are communicated through informal requests on a one-to-one basis, either through the OH Center teacher or Mr. Johnson. In addition, many teachers in interviews stated that certain teachers prefer certain types of students. Some teachers welcome opportunities to work with "problem" children and minority children and some welcome high-achievers and those who are in need of or respond to a teacher-centered, more structured class environment. Mr. Johnson has the final say in matters of placement, and takes the above issues into account as well as school-wide concerns such as distribution of personnel resources and the number of aides needed.

Educational Planning Procedures

Another critical decision making process is the development of the Individualized Education Plan (IEP). The IEP Team meeting is one of the few if only, occasions when all of the professionals responsible for delivering services to the child gather together in a formalized meeting to determine the student's school experience. However, time constraints have reduced some school personnel involvement. Funding cuts in the County Health Department have resulted in the absence of therapists at IEP team meetings. The school psychologist also was affected, in that her time became so involved with assessments required for IEPs, that she
was no longer available for ongoing consultations with general education staff.

Teachers do not always view the formal product of the IEP as a useful tool in carrying out implementation strategies on a day-to-day basis in the classroom. One of the major problems seems to be the document's lack of clarity and specificity. One teacher's explanation of the IEP is typical. Reading from an IEP, she states:

The goal is to successfully mainstream. It's very general. Resource help will be provided. Physical needs will be attended to. Modified classroom furniture. Therapy procedures. Academic accomplishment: give consistent instruction. He'll be successful in these areas. But it doesn't tell how he's going to be successful. There aren't any real specific learning objectives.

An OH teacher echoes these concerns and adds: "There are many things that you don't write in the IEP that you become attuned to just in observing the child that you work on. I mean, I don't stick with the IEP. I see what the needs of the child are and work from there." These statements from teachers suggest that educational planning procedures have become bureaucratic and routinized rather than an integral part of the instructional process.

Initial Preparation Procedures

Once placement decisions have been made and the child's goals determined, the third area of concern that prompts communication among school staff is initial preparation for the child's arrival the first day of class in the fall. All of the general education teachers report some form of communication with OH Center staff to relay information about individual students. Again, the communication is almost always informal, one-to-one, and initiated by individual teachers. One kindergarten teacher
states that the special education teacher "described these children to me before I met them and she really did a lot to get my mind prepared to meet these children. She described Chris and Laura to me as delightful little kids that you get to know as people and soon forget their handicap."

The first grade teachers also met with Mr. Richards and Mrs. Temple (two OH Center teachers). Mr. Richards has developed a more formalized procedure for communicating essential information. He states:

Usually the teacher is pretty busy just before school starts so I've developed a form. It sort of capsulizes the youngster—the age, the birth date, the therapy procedures, the physical needs of the child. I put down the different people that would be in that child's life. The therapists' names...the therapy procedures of the general education class. I try to put down all of it in one or two pages so the teacher can kind of catch the essential points. And I also put in about the weekly schedule and just indicate that I'm going to need information from the general education teacher about when their music will be and library time.

In addition to these on-on-one meetings and sharing of information, some group time is devoted to preparation. The OH Center staff usually spends five to ten minutes describing the OH Program and mainstreaming goals at Back-To-School Night, when teachers and parents are present.

The OH Center teachers also allot some time at the beginning of each school year to explain physical differences to general education students. This time is flexible, and special education teachers often rely on general education teachers to take the initiative in requesting that they provide this information sharing time to their classes.

Ongoing Institutional Support

Ongoing support systems are also critical influences on classroom integration. The amount of individual help to the student and teacher underwent continual adjustments throughout the school year as teachers
learned the needs of individual children and made decisions about the 
amount of support needed to maintain the dynamics of classroom interaction 
they viewed as important to the group goals. Each teacher sought their 
own levels of support they valued as necessary to run their classrooms in 
a manner that was comfortable for them. The type of support most often 
perceived as critical by general education teachers was the availability 
of aides in the classroom. A compilation of several teachers' comments 
regarding aide support is listed below:

The aide is a godsend to us because she is willing and able to work 
with other children as well as Mark...and that has been what has made 
it work. We could never do it without that.

Mark's mainstreaming depends on how much support he's going to have 
from OH. I think in every way possible he should be part of regular 
programs. He's going to need support to do it.

I am terribly dependent on having someone there. To be available. 
Mr. Richards has clued to me that I should expect to prepare for Mark 
as I do for other children. And that it's up to them to make the 
adaptations. Give me the guidelines. If I can do a part of it to 
make it easier for him I do. But if I can't, I know they are there 
to pick up on it.

The specific support these teachers are referring to as essential varied 
according to class size, instructional needs, grade level, physical 
assistance that individual students required, and the previous experiences 
teachers had working with OH children. Mrs. Mason's description of her 
specific needs and problems as a kindergarten teacher with respect to 
ongoing physical support are typical:

There are times when the aide will be there frequently to help. 
There are other times when nobody is there and sometimes that's fine. 
And other times things get tight. It depends so much upon the child. 
This year those kids were so able to get around and help themselves 
that I didn't see it as any problem. The year before it was difficult. 
It was my first year so I was a bit scared about how to proceed and 
things would come up like Bobby in a wheelchair who had to go to the 
bathroom. He was kind of a large child so it was a little hard to
maneuver him. And it would mean leaving the kids...to take care of him and that would create minor problems every once in a while.

First grade teachers were more concerned with instructional needs. Mrs. Jacobs, a first grade teacher, related: "I think they have to have some success [in learning]. And the only way to do that is to have one-on-one. I couldn't do it in the classroom for them. That's why Mr. Richards was able to adjust his schedule so he could come in for a half hour during reading time."

OH Center teachers and General Education Center teachers also spent time negotiating and clarifying their roles and responsibilities with respect to ongoing instructional support. Mrs. Lambert, a first grade teacher, states:

My only concern was what the expectation was for Mark's involvement in the classroom, and how to get my own responsibilities clear and at a comfortable point. It's listed that he is mainstreamed full time. Which to me felt like, I'm responsible for his learning. And I questioned it. I am uncomfortable with the idea of his being a full time mainstreamed child. But what he does is go to Mr. Richards as resource specialist. I though, well, ok, I can function with that. We do what we can do here, and Mr. Richards will pick up and move with it and that's how it's worked.

In summary, as the needs of students and teachers unfolded during the school year, responsibilities for carrying out daily instructional and physical activities for OH students were negotiated and clarified. Mr. Richards adjusted his schedule to provide instructional support, and Mrs. Lambert did some adjusting of her responsibilities with respect to Mark. These negotiations again took the form of informal and mostly verbal exchanges on a one-to-one basis.
FEDERAL, STATE, AND LOCAL CONTEXTS

Legislative mandates require specific levels of mainstreaming and support for disabled children through public law and regulatory guidelines. These mandates provide a baseline for guarantees of equal opportunity for socialization. The school district interprets and implements these guidelines in a way that impacts the ideology of mainstreaming. Physical integration can be accomplished, but without district support, social integration can be hampered. Finally, regardless of mainstreaming goals and intentions for implementation of these goals, fiscal resources place boundaries on what can be accomplished.

The concept of mainstreaming, what it means and what it entails has undergone changes since passage of Public Law 94-142 at all levels of the system of special education. As school systems have struggled to interpret and implement the mandates for a "free appropriate public education" of all children, mainstreaming was initially misinterpreted by some people to mean regular class placement with no special services. As time and struggles have passed, "mainstreaming has more realistically come to mean that most mildly handicapped students are basically served in general education classes and are separated from their nonhandicapped peers only for special instruction or services that cannot realistically be provided in the regular classroom" (Mayer, 1982: 6).

In 1978, the State Board of Education for Middlefield School District adopted a concept statement in response to the "realism" of putting policy into practice. Entitled, "The Least Restrictive Environment and Mainstreaming. The Confusion and a Clarification", this document attempts
to clarify the intent of mainstreaming. A new term coined "least restrictive alternative" is described as follows:

Public education must offer special assistance to exceptional individuals in a setting which promotes maximum interaction with the general school population and which is appropriate to the needs of both.

In keeping with this new concept, the word mainstreaming does not appear in the State Master Plan. Instead, integration of children whose similarities are seen as more important than their differences is stressed. The state recognizes that "the future of general and special education depends on programs that are designed to respond to the changing needs of all pupils."

This Master Plan further recognizes the need for flexible instructional components to carry out the goal of integration. This need is supported through specialized funding formulas that take into account program needs as well as individual needs.

In addition, a memorandum from the State Superintendent of Public Instruction to members of the State Advisory Commission on Special Education, dated April 25, 1984, recognizes the need for transition strategies in carrying out public policy. A series of reform issue papers included in the memorandum includes the statement: "The initial presumption is not that the student or program is deficient, but that the effectiveness of the interaction between the student and the program can be modified to insure success."

The taxonomy set forth in Figure 1 recognizes the influence of individuals in interaction with others in their environment as well as the importance of particular environmental resources. Description of the six major components points to linkages among them. Federal mandates guarantee the
right of handicapped children to education in the least restrictive environment. The school program implements these mandates through provision of a mainstream program. The mainstream program provides resources for the classroom teachers such as resource teachers, classroom aides, classroom materials, and physical facilities that are accessible to all children. Support is also supplied at the school level through informal and formal procedures for communication and information sharing. Mainstreaming goals and moral support for the spirit and intent of the law are provided by the principal's leadership and active involvement in the program. Teachers recognize that without these environmental supports and resources, the mainstreaming program at Middlefield School "would not work."

THE EFFECT OF VALUES, RESOURCES, AND INTEGRATIVE MECHANISMS ON CLASSROOM INTEGRATION

The structural organization and decision-making processes involved in a mainstream program affect the structure as well as strategies and outcomes of integration in significant ways. These structures and their characteristics include policy interpretations; personnel selection and training; informal and formal decision-making processes involved in student placement, preparation, educational planning and ongoing instructional support. Figure 4 sets forth the resultant model of integration processes in a mainstream environment.

In this model, two groups of conditions are the driving forces external to classroom socialization—resources and values. Resources constitute fiscal allocations and restraints, school curriculum and programs, community socioeconomic level, special materials, personnel, equipment and facilities. Values include degree of commitment, criteria, and goals of mainstreaming.
The integrative mechanisms in the model link values and resources to classroom interaction components and include policy, role, and decision-making processes. Participants in mainstream programs develop policies in conformance with values and implement these policies through assigned roles and responsibilities involving both formal and informal decision-making processes that differ by forms of cooperation and communication. Integrative mechanisms are powered by teachers, support personnel, leadership, and parents as well as students in the environment. These individuals bring values, allocate resources, and make decisions about students' schooling experiences that provide the props and act as the catalyst for socialization.

These external forces (resources and values) and integrative mechanisms (policy, roles, and decision-making processes), are powered by individuals who shape the boundaries of classroom interaction components illustrated by the three dimensional box in the model. Outcomes of adaptation, acceptance, and independence operate through these classroom interaction components and are dependent on student and teacher characteristics and ways of managing social interaction.

Mainstreaming as a process of socialization has thus come to mean more than strategies and points of negotiation between teachers and students in classrooms. The interplay of expectations and actions in interpersonal contacts forms only a part of a layered web of social interaction. Socialization not only constitutes conscious communication and action between people but is now defined as a process of interaction powered by individuals within a structured environment. This process includes
functional responses that are socially constructed through manipulation of environmental conditions--both inside and outside of the classroom.

A look at the integrative mechanisms and their interaction with resources and values as they impinge upon classroom socialization, provides the key to sorting out the totality of conditions needed to effect outcomes of positive social integration for handicapped children and their peers. First, the attitudes and values towards mainstreaming are translated into action of placement and instructional management by teachers, principals, and support personnel. Second, these actions are negotiated over time through assignment of roles. Third, various forms of communication and cooperation are involved in decision-making. Teachers and other professionals involved in carrying out the mainstream program have ways of reshaping and choosing optio at a program level similar to the reshaping and choosing of socialization experiences employed by student as they interact with each other on an individual level.

IMPLICATIONS: THE SCHOOL AS POLICY DIRECTOR

Clarifying the Mission: The Climate for Acceptance

The goal of mainstreaming as positive social integration of all students requires a clear mission and unconditional commitment to implementing practices that support the mission. At Middlefield School, the school handbook clearly stated this mission. This mission sets the stage for acceptance that goes beyond mere physical integration. The school climate at Middlefield further supported program and social integration through "reverse" mainstream practices involving sharing of facilities, equipment,
and personnel between "general" and "special" education. Special education teachers provide instruction to both general and special education students. OH Center aides assist in general education classrooms, specialized equipment such as adapted playground structures are open to general and special education students.

This sharing of resources diminishes the separation between programs, extending the notion that special and general education are neither dichotomous or fundamentally different. Both exist to further the education of children and are thus able to cater to a wide variety of students within a program planned as a whole.

A school climate that promotes acceptance of physically handicapped children through physical, programmatic, and social integration, does not do so unconsciously. Faculty and staff meetings at the beginning of the year at Middlefield School focused on specific ways to promote their mission. School personnel were asked to address the question, "What are some things we can do together to further maximize mainstreaming and interaction among nondisabled and disabled kids?" A set of specific goals were then developed to address the need. Suggestions at the program level included in-service programs as well as ways to improve communication and further share resources. At the individual level, suggestions included peer-tutoring and the cooperative production of dramas and skits with older students assisting younger students in both general and special education.

The climate of acceptance was thus supported by: 1) a clear mission that emphasized learning together at all program levels, 2) an administrative structure that encouraged cooperation and flexibility
with respect to use of resources, and 3) personnel attention to planned integration at all levels of the system.

Negotiating Roles: The Stage for Adaptation

Positive social integration involves a conscious restructuring of intergroup relations. Teachers, therapists, and aides at Middlefield School negotiated their roles through ongoing assessment of individual student needs and examination of their own abilities to provide instructional support, given the situational context and the dynamics of their particular classrooms.

Class size, instructional needs, grade level, physical assistance required, and previous experience with physically handicapped children, all combined to make educators' roles situationally determinate and required flexibility in responding to individual student's needs. Mrs. Lambert questioned how much of the responsibility for Mark's learning would fall on her shoulders. In her words, after talking with the resource teacher, her role was clarified as not having the full responsibility "to make him an independent learner" but to give him "as complete a classroom experience as I could." This role clarification did much to set Mrs. Lambert at ease regarding Mark's participation in her classroom, creating a climate of acceptance for Mark.

This kind of role negotiation between individual teachers is a double-edged sword, however. In some cases, delegating responsibility for a child's learning to special education personnel can result in the increasing withdrawal of handicapped students from general education classrooms for specialized individual instruction. In other instances, special education
support can lead to a greater understanding of student potential and further integration.

Adaptation does not mean relinquishing authority and responsibility. It does mean mutual accommodation and cooperation among special and general education teachers so that students can remain in the general education classroom to the extent possible. Adaptation requires that special education personnel be responsive to individual teacher's needs while at the same time developing the confidence of general education teachers to provide an appropriate learning environment for all children in their classrooms.

Implementing Decisions: The Case for Cooperation

Policies and procedures at the school level involving implementation of the mainstreaming program were carried out informally as well as formally at Middlefield School. Three critical areas involving decisions included student placement, educational planning, and ongoing institutional support.

Formal student placement procedures included IEP team meetings and the principal's assessment of available resources school-wide. Informal means of students placement depended largely on individual initiative in stating personal preferences. Both formal and informal means of decision-making were influential, and sometimes informal requests took precedence over formal mechanisms. Educational planning procedures were formalized through the IEP as a written document, but as some teachers pointed out, they relied many times on their own observations and individual assessments of the student to carry out instructional planning. Ongoing institutional support involved both formal assignment of aides to particular classrooms.
as well as informal role negotiations between individual general and special education teachers.

Overall, informal one-to-one individually initiated cooperation took precedence over bureaucratic and routinized procedures such as the Individualized Education Plan. While individual initiative and informal networking complement the need for flexibility and timely interventions to instigate needed change, some formalization of decision-making processes is necessary. During interviews, teachers consistently pointed to the need for more and better communication between the OH Center and the General Education Program.

Communication is necessary for cooperative planning of a child's educational experience. Teachers recognized this need and suggested release time to visit each other's classrooms and that a certain amount of time be set aside during staff meetings to deal specifically with mainstreaming issues. Both of these suggestions provide a more formalized means of communication, while at the same time avoid bureaucratic and routinized responses. Again, a need for a balance between informal and formal means of decision-making is evident. Individual initiative and informal networking need the support of formal mechanisms or specific times within which these decisions can be made.

Mainstreaming policy, roles, and decision-making processes are the integrative mechanisms that link resources to classroom interaction components. Clarifying the mission of mainstreaming, negotiating roles, and implementing decisions through cooperative efforts, both formally and informally, are necessary in order for adaptation and acceptance to occur.
These must be planned and accomplished at the school level through a clear policy direction.

The District and Community as Supporters

The same strategies for promoting a flexible and responsive system at the school level hold true in the wider environment. A committed, actively involved community that is open to change and to learning from experience, supports positive social integration. Education is then no longer a grafting process but a process whereby education as a whole is integrated.

Federal law and legislative mandates have been ambiguous regarding ways to go about implementing a "free appropriate public education" for handicapped children. This lack of clarity allows communities to respond to integration requirements in ways that maximize local resources and provide opportunities to carry out the spirit as well as the intent of the law. The spirit of Public Law 94-142 requires attitudes and commitment that support integration. Commitment must be accompanied by action. Resources must be available and integrated. "Open-door" policies must be accompanied by literally open doors--physical access, close proximity of services, and equal use of all facilities.

In addition, the classroom ratio of handicapped and nonhandicapped students should, to the extent possible, reflect the same proportion found in the community. Children must engage in socialization that reflects the life outside the classroom to the extent possible. This is important for handicapped students as well as for nonhandicapped students.

Further, school policies and community programs should avoid labeling students and facilities. The "OH Center" or the "OH kid" are unnecessary
distinctions and further separate children from the mainstream who are in "Mrs. Jacobs' class" or in "room 209."

CONCLUSIONS: IF THE SEVERELY HANDICAPPED, THEN WHY NOT ALL?

This study assumes that positive social integration of physically handicapped children in a mainstream program is an achievable and worthwhile goal. Children who learn to interact on an equal level with their peers benefit in quality of life chances and improved abilities to adapt to and accept differences inherent in society as a whole.

There is no one type of mainstream program and no one right effective strategy for a program. Therefore, generalizations across mainstream programs can not be made. However, examination of the mainstream program at Middlefield School suggests some guiding principles for assessing the efficacy and equality of a given mainstream program. Evaluators can subject a mainstream program to several tests: the range of alternatives it provides, the balance of activities available, and the match of students and program. These tests should be applied structurally to classroom components as well as procedurally to the internal and external dynamics of the entire system at three levels: physically, programmatically, and socially.

The following questions should be asked regarding the system as a whole:
1) Does the program provide the widest range of alternatives possible?
2) Is there a balance of alternatives? 3) Do program alternatives and balance of alternatives maximize individual student abilities and minimize differences? Degree of adaptation, acceptance, and independence depends
on degree of range, balance, and match that exists. The maximal degree is achieved through flexibility, responsiveness, and willingness to change.

This study focuses on physically handicapped children in kindergarten and first grade. The processes and conditions described apply to a population of children considered "severely handicapped". As a group, orthopedically handicapped children are considered one of the most difficult groups to be mainstreamed. If mainstreaming can work for these children, why not for the much larger population of mildly handicapped children?

Integration is not inherently different for groups with different handicaps. A particular disability may impose limits (such as physical ones), but the process of maximizing a child's potential is essentially the same for all children. A label or a physical handicap is only one aspect of a child. Various other factors are equally important to learning and positive social integration; e.g., personal motivation, assertiveness, access to resources, expectations, and values. All of these factors apply to the education of any child.

Finally, descriptions of mainstreaming in kindergarten and first grade allow a glimpse of the process from its beginnings. This beginning glimpse allows educators to develop and assess programs that are timely. Intervention at the beginning stages of socialization gives students and educators a head start in working to equalize opportunities for an appropriate education, setting the stage for a greater degree of positive social integration as children advance to higher grades and out into society.
REFERENCES


Figure 1: A Taxonomy for Understanding the Impact of Mainstream Programs

Community Environment
- Fiscal Allocations/Constraints
- Legislative Mandates
- Attitudes/Values towards Mainstreaming
- Level of Interest in School Affairs
- Degree of Structure
- Socio-Economic Level
- Ratio of Adults with School Age Children
- Degree of Commitment to Mainstreaming

School Program
- Criteria for Mainstreaming
- Type of Curriculum
- Child-Staff Ratio
- Special Materials, Equipment, Facilities
- Ratio of Disabled/Nondisabled
- Degree of Structure
- Use of Community Resources
- Goals of Mainstreaming
- Type of Leadership Provided
- Experience with Mainstreaming

Handicapped Child
- Age, Sex, Race
- Type of Mobility Adaptations
- Physical Appearance
- Socialization Experiences
- Self-Help Skills
- Self-Concept
- Personality and Temperament
- Modeling Behavior/Ascribed Roles

Parents/Family
- Age, Education, Race
- Attitudes/Values towards Disability
- Relationship with Others
- Participation in Child's Activities
- Expectations for Child
- Number of Siblings and their Relationships
- Exposure to Mainstreaming
- Sources of Support
- Family Cohesiveness

Teacher
- Age, Sex, Race
- Previous Experience with Disability
- Attitudes/Values
- Expectations of Students
- Relationship with Others
- Number of Years Teaching
- Perceived Need for Supportive Services

Peers
- Age, Sex, Race
- Awareness of Disability
- Attitudes Toward Disability
- Previous Experiences
- Modeling Behavior/Roles
- Play Preferences (Piaget)
- Personality and Temperament
Figure 4: Model of Socialization in a Mainstream Environment

DRIVING FORCES

RESOURCES

GOALS/VALUES

INTEGRATIVE MECHANISMS

Policy
Roles
Decision-making Processes

CLASSROOM INTERACTION COMPONENTS

STRUCTURE

Time
Space
Grade Level
Group Size
Subject Matter
Task Organization

WAYS OF COMMUNICATING EXPECTATIONS
Bargaining
Rule Negotiation
Accommodations
Control Interventions

STRATEGIES

ADAPTATION

ACCEPTANCE

INDEPENDENCE

SOCIAL INTEGRATION