

DOCUMENT RESUME

ED 365 050

EC 302 675

AUTHOR Sailor, Wayne; And Others  
 TITLE School Restructuring & Full Inclusion. Revision 5. Prepublication Copy.  
 INSTITUTION San Francisco State Univ., CA. California Research Inst.  
 SPONS AGENCY Department of Education, Washington, DC.  
 PUB DATE [92]  
 NOTE 94p.  
 PUB TYPE Viewpoints (Opinion/Position Papers, Essays, etc.) (120)

EDRS PRICE MF01/PC04 Plus Postage.  
 DESCRIPTORS Change Strategies; Curriculum Development; Delivery Systems; Educational Change; Educational Policy; Elementary Secondary Education; Individualized Instruction; \*Mainstreaming; \*Normalization (Disabilities); Peer Relationship; \*Regular and Special Education Relationship; \*School Restructuring; \*Severe Mental Retardation; \*Social Integration; Teamwork  
 IDENTIFIERS Performance Based Evaluation

ABSTRACT

This monograph addresses the issue of full inclusion of children and youth with severe intellectual disabilities and whether this form of social and academic integration is consistent with the direction of present school reform policies. The first section examines the implications of current efforts in educational reform. A case study illustrates differences between integration and inclusion. Key elements of full inclusion are identified: (1) full general education class membership; (2) full perception of "ownership" by the general education program (including special education); (3) individual outcomes-based decision making; (4) student-based services with team curriculum design; and (5) site team coordination of services and educational support. Next, issues in education policy are discussed such as recent trends in general education policy and reform. The following critical variables in school restructuring are identified: curriculum revision, performance-based assessment, decentralized instruction, school autonomy, site-based management and budgeting, shared decision making, infusion and coordination of educational resources, and community involvement. Finally, the comprehensive local school is described as a framework for inclusion through delivery of a variety of special education services and through systematic team design of the individual's curriculum within the general curriculum. (Contains 87 references.) (DB)

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**Revision 5**  
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Chapter 1  
School Restructuring and Full Inclusion<sup>1</sup>

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RUNNING HEAD:           Restructuring and Full Inclusion

To appear in M. Snell (Ed.), Systematic instruction of persons with severe handicaps (4th ed.) Columbus, OH: Charles Merrill Publishing Co.

## Chapter 1

## SCHOOL RESTRUCTURING AND FULL INCLUSION

Bob Dylan said "the times, they are a-changing," and the schools provide an excellent place to witness the effects of that process in action. Millions of newcomers have arrived on our country's shores since those words were sung, bringing with them a rich pattern of cultures, languages, and, in the case of their children, a rich variety of learning styles. Misguided and almost unbelievably short-sighted economic policies have, over the same period, created an underclass of chronically unemployed and even homeless people whose children reflect a variety of effects of the ravages of poverty. Youth gangs, drugs, vandalism, teen pregnancy, and high school drop-out have become staples of a significant number of our nation's secondary schools. All of these social ills have placed an enormous burden and strain on our educational system. The efforts that are presently under way to change our educational system and our other social service systems to enable us to cope with these social problems, and the implications of these changes for children and youth with severe intellectual disabilities, form the topic of this chapter.

In this chapter, we shall address the issue of full inclusion of these students, a concept that we will define later in the chapter; and whether this form of social and academic integration in the schools is consistent with the direction of present school reform policies.

### Integration and Educational Reform

In this section we begin our discussion of issues affecting "full inclusion," or strategies for attaining the maximum amount of integration possible for students with severe disabilities, by examining the implications of current efforts in educational reform. The progressive pattern of increased integration of students with severe disabilities into general education schools and classrooms has not emerged over the past decade without significant resistance. Much of the resistance comes from within the field of special education. Special educators often seem to feel that something is being lost in the process of integration; that turf is being relinquished, and that children will lose their entitlement to specialized instruction, services, and the protections of due process.

On the other hand, resistance to inclusive education from general educators seems to take the form of a defensive posture. Problems of large class sizes, shrinking budgets, and more difficult students give rise to a perception of special education students as yet one more problem to add to an overburdened system.

Special educators actively pursuing enhanced levels of integration for students with severe disabilities, in the face of all this resistance have tended in recent years to adopt two somewhat disparate strategies to accomplish their objectives. One set of tactics seems to be defined by a values-driven ethic. Children with disabilities should be included because they have a right to association guaranteed by the Fourteenth Amendment, and because they are entitled to friendships and social participation, the same as anyone else. Tactics of integration from this standpoint are clearly consistent with the

historical (and continuing) civil rights tradition in this country, and much of the ground that has been gained has been won through the courts, in the true civil rights tradition.

There is a second set of tactics with which to accomplish the integration of our students, however, and it is this second strategy that bears careful scrutiny in the light of contemporary school reform. Philosophically, it is essentially pragmatic. Children with disabilities should be included in general education because the special resources to assist them have direct relevance to the solutions to myriad problems confronting general education teachers in today's classrooms. If integration is educationally better for special education children, and if their full participation in the broader-based arena of general education enriches the total pattern of educational resources for all children, then does it make any sense to continue to segregate children with disabilities and deliver their entitlement separately from the rest of education? We think not, and we present the basis for our position in the pages to follow. Rightly or wrongly (e.g., Goetz & Sailor, 1990; Kauffman & Hallahan, 1990; McLeskey, Skiba, & Wilcox, 1990), there is a clear and persistent trend emerging in the direction of a greater fusion of special education within the framework and processes of general education. Students preparing for careers in the education of students with severe intellectual disabilities need now, more than ever before, to have a working knowledge of general education reform processes and where children with disabilities and with various entitlements fit into that reform process.

From Integration to Inclusion.

While inclusive classrooms is a concept still in its infancy, it has grown out of the enormous data base that supports the increased integration of students with disabilities by documenting increased independence, skill acquisition, friendships and social integration, as a direct function of increased school and community interactive contacts with nondisabled, similar-age peers (see Halvorsen & Sailor, 1990; Sailor et al., 1989; and Stainback & Stainback, 1992, for literature reviews). The literature on best practices for persons with severe intellectual disabilities (including students with additional sensory and/or physical disabilities) has documented enhanced educational outcomes associated with integrated placements when compared to their segregated counterparts in such areas as social and affective development; skill generalization; parental expectations for the child's future; health and increased independence; proportion of IEP objectives obtained; postschool or school-related job earnings; postschool or school-related integrated work placements; normalized living circumstances; the degree of integration in the next educational environment; the attitudes of the nondisabled students at school; and the attitudes of persons in the community (see Halvorsen & Sailor, 1990, for a review). This body of research literature is sufficient to demonstrate that we need no longer spend energy and resources debating the issue of whether or not to integrate or include students with severe disabilities in the learning environments of their nondisabled peers, but can concentrate instead on how best to do it.



In the 1980s, instructional methodology for what was termed "integrated, community based instruction" by Sailor, Goetz, Anderson, Hunt, and Gee (1988) was defined by eight general best practices:

1. A primary focus on decreasing the differences between severely disabled students and nondisabled peers by keeping activities, settings, and instructional materials age-appropriate, and by keeping a natural ratio of disabled to nondisabled persons in all instructional contexts.
2. Instruction occurs across many school and surrounding community environments and is imparted by a variety of adults and peers.
3. Structured, sustained interactions among disabled and nondisabled age peers are fostered and encouraged by teaching staff.
4. Instructional technology and adaptations are utilized such that each student participates, at least partially, in a variety of age-appropriate activities in integrated domestic, recreational, school, and vocational settings.
5. A functional life skills curriculum focus is maintained.
6. An instructional model wherein teaching occurs as much as possible in the context in which the taught skills will ultimately be performed, in order to capitalize on naturally occurring stimuli, routines, and motivational factors.
7. An integrated therapy model in which teachers, parents, and therapists work together to determine basic skill needs and to provide appropriate intervention in natural contexts.
8. A commitment to the likelihood of a nonsheltered future which stresses work and maximally independent living circumstances.

Achieving the successful social and educational integration of students with severe disabilities has since been identified as associated with several additional best practices which bring the goals of general and special education together through collaboration, ownership, celebration of diversity, and standards of success for all students (Halvorsen, 1989). Since the educational move to instruction in integrated and natural contexts, the focus in the literature of program implementation has shifted from discussions on particular aspects of program and IEP development and instructional delivery in integrated and community-based settings to more recent discussions of the unification of regular and special education systems in order to create effective schools for all students, and finally to curriculum considerations in inclusive classrooms.

Inclusive programs for students with severe intellectual disabilities are currently being implemented in several states. In some instances full inclusion has been the direct result of a logical extension of ongoing integration of students assigned to a special education class at a particular school.

What is this thing called "full inclusion," or "inclusive education," as it is sometimes called, and how does it differ from other approaches to integrating students with disabilities for their educational programs? Consider the case of "Holly," a young elementary school student. First, we examine Holly's experience as a special class student, and compare that experience with her full inclusion in the second grade for the subsequent school year.

The 1989-1990 school year (special class): Holly, a six-year-old student in Karen Hargrove's special education class for students labelled "severely handicapped", arrives on the special education bus. Some of her friends from the first grade greet her at the bus and push her in her wheelchair to Karen's class, they say goodbye and go to their classroom. Holly is given assistance to put her things away and join the other students. After an activity period in the special education class, some friends from first grade come to get Holly and she and one other student from Karen's class participate in the first grade for an activity period at manipulatives tables and the story time. Then they go to recess with the first grade. After recess Holly returns to the special day class for more instruction. On Mondays and Wednesdays her speech therapist arrives and spends time with Holly and her teacher, and on Tuesdays and Thursdays her physical therapist arrives and works with her together with some first grade students who come into the special class for leisure time activities. At lunchtime her peers again return to bring her to the lunchroom. All the students in Karen's class have recess and lunch with the nondisabled students. After the lunch recess Holly returns to class and receives some instruction on self-help skills and uses the bathroom, etc. In the afternoon on Mondays she goes with the first grade to the library, on Wednesdays it's art, and on Friday it's music. On Tuesday and Thursday afternoons Holly's Orientation and Mobility teacher comes to take her into the community to the store or fast food restaurants; and has arranged for Holly to have a school job delivering notices around the school to work on her orientation and tactile discrimination skills (Holly has dual sensory impairments).

Holly has lots of friends at school and by the end of the year she has had a few opportunities to get together with her friends outside of school hours. Her teacher has

worked hard to facilitate those interactions and has taught her peers how to communicate with Holly during the times they spend together.

At the end of the year, Karen sits down with Holly's first grade friends and talks about next year. She asks them what they think would make Holly's next school year a good one, and what they think would make Holly happy. They respond by telling her that Holly should spend more time with them in their class and not leave so much, that she should learn to play more of their games, and that she should go to skate night and the Halloween party next year. After a long list of other things Holly should work on, such as communication, not drooling so much, keeping her noises down during library time, etc. Karen talks to Holly's Mom who indicates that one of the most exciting things for Holly this past year has been the fact that she was invited to Jane's birthday party and that for the first time she felt that Holly had friends who truly wanted to play with her and spend time with her. Holly's Mom also reports that she was no longer worried about Holly eating in the cafeteria and is less concerned with the amount of time she has in therapy. She wants continued work on the new communication system, more work on orientation and discrimination skills, and if possible, more time with her nondisabled peers.

Karen agrees with all of these needs, but goes back to her classroom and takes a deep breath. It took two months at the beginning of this school year to get all the arrangements made to allow Holly and another student from her class to participate in the first grade. The first grade teacher, Harvey, was extremely open and willing to give her students' participation a try. Karen had spent many hours doing "P.R." to get general class time for her other 7 students as well. Two students, who were 5th grade age, never got time in the general class and their integration remained at lunch, recess, and "reverse-mainstreaming" times when she had nondisabled peers from the 5th

grade come into her class for cooking and science activities which she organized. Karen is concerned about next year and whether or not the second grade teachers will be open to Holly's participation. She is concerned about all of her students and being able to continue to do the P.R. necessary to arrange for integration and inclusion, as well as do the programming and curricular aspects of her job. The teachers at the school are generally positive about integration but the job really falls to Karen.

The 1990-91 school year (inclusive class). After some exciting meetings in the summer, the 1990-91 school year starts with some very important changes. It has been decided that Karen's class will now be fully included into the elementary school. Integration has been very successful and parents have been very active in the pursuit of an equitable service delivery system. The principal at the site has a forward vision for school excellence and, to make a long story short, the school has decided to make this change. What does it mean for Holly in this first year of change?

Holly still arrives on the special education bus. Her peers, now second graders, pick up Holly at the bus and accompany her to the school yard where they wait for the second grade teacher to gather her class when the bell rings. A staff person accompanies Holly and her peers and also one other student with severe disabilities from Karen's class and his peers to provide support when necessary. Holly is a second grader. She arrives in Ms. Tam's class with her friends and they assist her as necessary to get her things put away and get to their tables. Holly's name is called on the attendance roll and her name is included in the teacher's groupings for all activities. Currently she is in the "triceratops" group (the students have picked dinosaur names for their cooperative learning groups during a science unit on dinosaurs). Holly spends her school day with Ms. Tam's second grade class. She takes a little longer to use the bathroom than the nondisabled children and she takes a little longer to eat, but those

arrangements are easily worked out. Karen is still responsible for making sure that her IEP goals are met within the second grade contexts. Holly's speech therapist works with her in the second grade classroom, and the physical therapist comes on Tuesdays during listening center and silent reading and works with Holly on the floor while she and some friends do story time together. The physical therapist also comes on Thursdays while Holly's class does "workshop", a particularly active time. The therapists work with Karen and her staff members to ensure that the goals are carried out across the second grade activities.

The orientation and mobility specialist comes and takes Holly into the community as before but this year some nondisabled peers accompany them in the community on various lessons (such as going to the store to shop for items that Ms. Tam needs for various cooking projects related to their geography lessons; reviewing street construction sites and community lay-outs; etc.). A school job requiring a lot of travel, delivering the milk cartons to each class, has been identified as especially useful for teaching orientation and mobility skills, and the O & M specialist comes twice a week and works with Holly while she and two nondisabled partners from the second grade deliver the milk. Since this is a second grade job, Holly gets practice daily with a variety of peers, and a staff person from Karen's program assists as needed on the days the O & M specialist is not present.

Programs to teach Holly's IEP goals are regularly monitored and evaluated by all the team members. Karen and Susan (Ms. Tam) meet as needed to ensure that Holly's goals are updated and that teaching strategies are adapted and supported by Karen and her staff. They discuss ways of communicating with Holly and ways to incorporate her participation into the lessons. During some lessons Holly and small groups of children from Susan's class engage in alternate activities with an

instructional assistant or Karen. These activities still accomplish Susan's goals for her second graders but are designed to accomplish more readily some of Holly's goals.

Karen provides support to Susan by giving suggestions for activities to teach various skills, teaching strategies for heterogeneous groups, ideas for increasing the attendance of some students who are chronically absent, ideas for math curriculum which will cut across the wide outcome levels of Susan's academic students, etc. Karen employs a problem solving approach to the delivery of support to Holly. She involves Holly's peers in actively and openly discussing ways for Holly to participate in each activity. They decide together who will provide her with the support she needs.

At the end of the year, the discussions with Holly's friends are much different, They now know Holly in a much different way as a full member of their class. They have discovered her strengths and her needs. They want to be sure that she will move on to third grade with them and that when they move to the upper elementary school in fourth grade, she will attend the same school. They want to know why she has to ride a special bus with only other students with disabilities. Holly's Mom is concerned, too, because the fourth through sixth grade school that Holly's friends will go to is not a school that has in the past taken students with severe disabilities.

Karen takes a deep breath.....

The 1991-92 school year. What will it be like? Holly's team has been working with the District on integrated transportation, the move to home school placement for the entire District, and integrated after-school programs.

#### Full Inclusion: Key Elements

Consider Holly's situation. What was different in her education between the 1989-90 and 1990-91 school years? You may have noticed that several key elements changed.

- Full general education class membership
- Full perception of "ownership" by the general education program (including special education)
- Individual outcomes-based decision making
- Student-based services with team curriculum design
- Site team coordination of services and educational support

Full general education class membership. Holly's 1990-91 school year started with full membership in the second grade. Her special education teacher, Karen, didn't have to spend two months doing "P.R.", knocking on teachers' classroom doors to ask for "favours", or go to a fair hearing. Instead, Holly's classroom was Ms. Tam's classroom, and she was placed with her peers in the second grade from the start of the school year.

This signals one of the key elements of change in the delivery of programs, and, in turn signals a change in the assessment and development of IEP goals, and instructional technology. In the American justice system the defendant has been proclaimed "innocent until proven guilty." In the American school system, however, children have often metaphorically been proclaimed guilty until proven innocent, or, "unable until proven able."

In other words, the special education class model with some opportunities to be mainstreamed operates under the assumption that the teachers can select those activities in which the student will best function in the general class, and, that if the student succeeds in one activity perhaps more can be added at a later date. A full inclusion model with full membership unquestioned from the start assumes the child to be as able as necessary and provides the support to ensure the success of that assumption.



Full ownership from both special and general education. During the 1990-91 school year Holly's teacher was no longer on her own to design integration and resource delivery. The extent of integration for her students no longer depended solely on her skills in "P.R." While Karen still had primary responsibility for her students' achievement of IEP goals, the school as a whole had taken ownership of Karen's students in the same manner as with the general education students. It was now the responsibility of all the school staff to ensure the integration of Karen's students and a high quality program for all students, as well as the allocation of resources to support all students in the general education classroom.

Individual outcomes-based decision making. Holly's IEP goals were reviewed after her initial integration into the second grade. Her goals and instructional programs were designed after a contextual assessment was implemented within each of the typical second grade activities, routines and curricular areas. During each activity within the second grade individual outcomes for Holly were targeted. In some instances these outcomes related to similar materials and routines being used by the other students with a different level of individual performance, and in some instances the outcomes related to interactions with the other students while engaging in the activities. In some instances the outcomes were very similar to her nondisabled peers, and in some instances they were very different. When the existing context or strategy provided by the second grade activities was not facilitative of Holly's IEP goals, alternative activities with second graders were designed or alternative teaching strategies were developed to encompass heterogeneous groups. In a few instances Holly left to receive her instruction

somewhere else in other integrated environments within the school or in the community but was accompanied by second graders who also benefitted from the nonclassroom lesson or activity. Holly's IEP goals were instructed within and across the day based on her individual needs.

Student-based services. During the 1990-91 school year Holly's speech therapist, physical therapist, and orientation and mobility specialist coordinated their services within the curriculum of the second grade classroom, connecting her with nondisabled peers, as well as in general school and community settings. Services were brought to the student with the purpose of providing support for her education in an integrated classroom. Holly's special education teacher, Karen, teamed with the second grade teacher to provide the instruction for Holly as well as the rest of the second graders. Karen coordinated instruction on Holly's IEP goals within and across the activities set up by Susan, the second grade teacher, and also designed new and creative activities for the second graders which would allow Holly to practice particular IEP goals. Karen directly trained all support staff who were responsible for teaching Holly within the second grade. Karen coordinated peer support systems for Holly and facilitated peer problem solving for ways to include Holly in various activities. Karen and her support staff also facilitated social and communicative interactions between Holly and her nondisabled peers.

Karen, her assistants, the second grade teacher, and the DIS staff, met regularly to discuss the implementation of the program, strategies, successes, failures, adaptations, etc. Karen and Holly met regularly with Holly's nondisabled peers, strengthening the peer support network and circle of

friends. The important change is that the 1990-91 school year signalled the start of Holly's team. While she had been served by transdisciplinary teams in the past, the change in her service delivery to a general classroom placement facilitated a change in the focus of the team.

Site-team coordination of services. In the 1990-91 school year Holly's support staff included a physical therapist, speech therapist, orientation and mobility specialist, her special education teacher, and special education instructional assistants. Previously Karen had been in charge of all the coordination of these services for Holly and her other students. She was also in charge of making sure there was coverage for each of her students who needed support from a staff person and arranging for their breaks, etc. The general class teacher, Susan, had an instructional assistant for 2 hours per day, as did all second grades. In addition to Holly and another student from Karen's program, Susan had other students who required extra support to meet the second grade curriculum goals. Similar situations existed in other classrooms at the site.

With the move to full inclusion a Site Resource Management Team was developed (Sailor, et al., 1989). This team consisted of representatives of general education teachers, special education teachers, instructional assistants, DIS staff, parents of children with disabilities and without disabilities, and the school principal. The purpose of the team was to look at the "big picture" -- i.e. the entire school -- in terms of support needs and available resources. The team worked as a small microcosm of the entire school community for the purpose of making equitable management decisions which would be difficult to accomplish in a large group.

For example, students requiring intensive support, such as Holly, brought with them a higher ratio of staff support, which could be used, at times, to facilitate instruction of small groups of students in order to increase the student to staff ratio in the second grade. Issues such as staff breaks for the special education staff, coverage when there was a staff absence, delivery of specialized health care services, etc. were discussed and problem solved at team meetings. The site resource team was also used to facilitate the infusion of the concept of ability awareness into the general curriculum at the school.

Each of the five key elements discussed above stress one particular word: support. While full inclusion means full membership in the general classroom, it must come with the full supports which are necessary to make it successful. Inclusion cannot be successful unless the student is successful. In California, The PEERS project (Providing Education for Everyone in Regular Schools, a statewide systems change project) suggests that when designing inclusive education programs we think of all students as members of the general education classroom, with some students requiring varying levels of support from special education. They use the term "supported education" as a term to explicitly describe the importance of providing support services in the general education classroom, when necessary, to ensure a quality educational program (Neary, Halvorsen, & Smithy, 1991). The PEERS project has developed guidelines or characteristics of inclusive educational programs to use in maintaining the integrity of the term, full inclusion. These eleven characteristics are presented in Table 1.

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Insert Table 1 about here

In these sections, we have thus far examined some of the issues involved in making decisions concerning the educational placements of students with extensive disabilities. The research literature, as well as contemporary values-based arguments, would seem to clearly point the way to a more fully inclusive educational program for students with disabilities. Yet progress is painfully slow in accomplishing even rudimentary progress in integrating students with severe intellectual disabilities into general education settings (Danielson & Bellamy, 1989; Haring et al., in press).

Solutions to overcoming these resistances are quite likely to be found in the context of the accelerating process of reform, in both special and general education. In the next section, we examine contemporary reform efforts in educational policy to see, first, if there is a basis for a shared educational agenda for special and general education, and second, if such a common agenda might facilitate the process of inclusive education for students with disabilities (see also Sailor, 1991 for a comprehensive review of the reform literature that bears on this issue).

### Education Policy

Recent trends in general education policy and efforts in reform. The rubric "reform" really emerged to replace the "improvement" language used to signal innovation in education following the report in April 1983 by the National Commission on Excellence in Education, A nation at risk. No single text before or since has so dramatically affected the average American's perspective on education and its role as a mainstay part of the country's pre-eminence in world leadership, its standing in the world marketplace, and its viability as a major world power "to be reckoned with." The portrait of

American education that emerged from the book was grim and the outlook pessimistic. The essential message was that Congress had better get active in the process of reversal of the decline in education, and that substantive changes must occur sooner rather than later.

These changes were swift in coming and now, in the retrospective of history, they can be viewed as comprising two separate "waves" of reform efforts: the first now generally referred to as the "school excellence" movement, and the more recent one as "school restructuring." We begin with a rather brief examination of some of the more salient aspects of first-wave efforts, not because they were less significant than those of the second-wave (they, in part, continue as ongoing efforts), but rather because the implications of those efforts for special education and for the issue of full inclusion are considerably less substantive.

The reforms of the school excellence movement may best be considered as process reforms in contradistinction to the later structural reforms of the second-wave efforts. In the months of the early 1980s, few questioned the appropriate locus of blame for the nation's educational problems. It was the schools. School accountability became the watchword, and a number of measures of school improvement emerged in the educational literature and even into the popular media of press and television. "Quality indicators," for example, were identified and schools were rated for their performance on "school report cards," and so on. Standardized performance test scores were published by district and by school (even by classroom, in some localities) in city and town newspapers so that members of the community would have a basis for evaluating the progress of

their local schools. State and district offices not uncommonly used school performance (as estimated by average test score changes) as criteria for rewarding or punishing schools with resource allocation, public attention, and so on. In turn, the schools responded to the challenge by increasingly teaching "what the tests measure."

Educational research efforts, largely concentrated in institutions of higher education and in private educational research laboratories, responded to the challenge with the introduction of significant innovations in curriculum and in methods of instruction. Innovations in curriculum have tended to be characterized by a kind of "back to basics" philosophy, with a strong emphasis on the development of a "core" curriculum to be mastered by all students within a given state. The elements of the newly developed core that most significantly differentiate newer from older curriculum approaches include, first, an emphasis on critical thinking skills and abstract cognitive processes relative to rote memorization of facts; second, an emphasis on application to real situations in the case of mathematics; and third, a return to the study of original literature rather than reliance on *précis*, synopses, and so on.

Instructional methods also underwent significant development in the reform context of this period with advances in the application of computer technology in the schools and, we think more importantly, in the instructional delivery process itself. "Effective schools research-based teaching" methods emerged during this period, with a strong emphasis on decentralization of instruction and more effective utilization of students as a part of the instructional program. Methods for the development and

utilization of cooperative learning groups emerged from this effort, as did various strategies for effective peer tutorials (cross- and same-aged ability), peer instruction groups, and so on.

Effective schools teaching methods, which are continuing to expand and proliferate today, provide a dramatic contrast between the older European model of class and class master as an instructional paradigm, with the discovery that students themselves can constitute a formidable instructional resource. Effective schools method classrooms are seldom characterized by the master (teacher) lecturing to an attentive class whose members are quietly and dutifully taking notes. Rather, a highly interactive process is occurring between a variety of adults with various educational roles and a class which spends a significant amount of time in various grouping configurations and in a greater variety of school environments. When a group of students engages in a cooperative production, students with relatively less ability learn from more advanced students, while the latter perform at a higher standard for having experienced the additional rehearsal strategy. Often, students who have relatively less ability in one aspect of a cooperative task will compensate eventually by displaying greater skill in a later aspect of the production, thus eliciting the motivation of even the weakest students to perform at a higher standard.

Present retrospective analyses of first-wave educational reform efforts tend to fault the school accountability agenda relative to student outcomes resulting from curricular and instructional innovations. Student outcome-based, research review literature suggests that first-wave efforts largely succeeded in interrupting some of the more salient indicators of a global



downward trend in American education, but that the successes were tending to be reflected in the 50% of students who were already achieving at a reasonable level before introduction of the reforms. In other words, the best students (as identified by their presence in the upper percentile ranks of a split median on standard performance and achievement tests) got even better and achieved more, but without much demonstrable improvement in the lower percentile ranks. The second wave of educational reform now appears to have arisen as a result of the failure of the first to significantly address the needs of students at risk for school failure and dropout.

Students at risk. Wholly encompassed within the lower performing 50% of the student population can be found an increasing proportion of students who, for a plethora of reasons, are identified to be "at risk" for a variety of difficulties. Definitions of the condition of being at risk run the gamut in the educational literature from detailed descriptions of various factors that place students at an educational disadvantage relative to other students (i.e., Hodginson, 1985; Levin, 1985, 1989; McDill, Natriello, & Pallas, 1986) to more general indicators such as "unlikely to graduate" (Slavin, 1989). Our own definition of "at risk" is focused on indicators that contribute to the probability that a student will fail in school or drop out. Among indicators that place students at risk are: (a) poverty; (b) non-English speaking or coming from a non-English speaking background; (c) ethnic minority status in the society at large, and (d) family factors such as residence in a single family household (Davis & McCaul, 1990). When societal indicators such as the above interact with constellations of factors associated with school organization, patterns of school failure and drop-out emerge (MDC, Inc., 1988;

Rose, 1989; Schoor, 1988). These problems and influences, perhaps significantly, are not limited to conditions of "inner city blight." Studies have shown patterns of risk among student populations, approximately as much as 50% of school memberships in some rural and suburban areas (National School Boards, 1989).

The current "buzz word" used to describe the problem posed by the conditions of being at risk for school drop-out and/failure is "the changing demography of America's school population." This concept, however, has an unfortunate "blame the victim" ring to it. It is not that children are more "multicultural" than they need to be, or that there are more newcomers to our shores who have limited skills in the English language, or even that there are more homeless children and children living in poverty than earlier in our postwar era. Rather, problems associated with being at risk are found to arise from an inability of our present educational organizational structures to adopt successfully to the challenges presented by these and other demographic changes in our schools. Some recent estimates of the incidence of students at risk for failure and drop-out in our society at large place the figure at about 30% and growing annually (New Partnerships, 1988).

Considering students with disabilities who are provided special education resources as a subclass of the population of students at risk, the rates of school failure and drop-out are surprisingly high, given the special supports available through the Individuals with Disabilities Education Act (IDEA).

Wagner et al. (1991), for example, recently reported the results of a longitudinal study conducted by SRI International, which revealed that only

56.1% of students enrolled in special education programs upon entering high school actually graduate. Of those who do not, 32.5% are drop-outs. The drop-out rates by disability category were about 50% for those students labeled emotionally disturbed, and nearly one-third of those labeled learning disabled, speech impaired, and mentally retarded. The data further revealed that school drop-out rates of students with disabilities are strongly linked to failure of one or more courses and absenteeism. Among those who drop out of high school, fewer than 40% were competitively employed two years after dropping out, and nearly 40% had been arrested at least once. This compares to only an 8% arrest rate for students who graduated. The cumulative results of the SRI study clearly support a conception of high school students with disabilities as being at risk for drop-out, and for related social problems later on.

The second wave of educational reform arose, in part, as a reaction by the schools to the bureaucratic constraints imposed by increased accountability standards. This reaction of the schools has taken the form of strong efforts on three related fronts: (a) the call for significant changes in the way schools are organized, internally as well as with respect to their local district or district consortium; (b) efforts to upgrade the status of the teaching profession through a variety of means, including higher salaries and more effective, collective bargaining strategies; and (c) thorough efforts to revise and revamp school finance systems through different administrative arrangements characterized by greater local (school site) control of resources. These efforts, collectively, have come to be known as school restructuring.

One of the key recommendations of the report of the National Center on Education and the Economy (NCEE, 1989) report that is of critical importance to the field of special education calls for a complete restructuring of the way that federal categorical programs, such as Special Education, Chapter 1, Limited-English Proficiency programs, etc., are operated. The report recommends that these programs be site- rather than district-administered, at least to a much greater degree, and that the students served through these programs be more fully integrated into the mainstreams of general education so that the rich pattern of resources available through these programs may be harnessed and coordinated at the school site to deploy these resources more effectively for the good of all students.

#### Second Wave of Reform: School Restructuring

Second wave educational reform efforts associated with school restructuring have been specifically targeted to address the needs of the at-risk population in the schools (Gartner & Lipsky, 1990; Lipsky & Gartner, 1989). Where earlier general education reform efforts were targeted at school board and district level strategies to improve school accountability and performance, current reform efforts are much more focused on structural factors in school organization and on the relationship of the school to the community it serves (Carnegie Foundation, 1988; Committee for Economic Development, 1987). These efforts include a strong measure of teacher empowerment in school governance and much greater community involvement, particularly through enhanced opportunities for family participation in the life of the school, and through direct linkages with business and industry (NCEE, 1989; Sailor, 1991).

How did this focus on social organization variables come about? As mentioned earlier, first wave efforts blamed the schools for the nation's educational woes. School "report cards" became commonplace as a way for the district or the state to evaluate school progress, usually in terms of increases on standardized tests of achievement and general knowledge from a sampling of subject areas. Second wave efforts appear to be focusing more directly upon actual student outcomes rather than comparative data on school performance. The issue seems to be, "How can we reorganize schools, decentralize teaching methods, and assess student outcomes more effectively in order to better support students who are deemed to be "at risk"?"

To better understand how this process is taking shape, and what the immediate implications of the process are for students with severe intellectual disabilities, we shall here delineate what, in our view, comprises a set of the more salient components of school restructuring.

#### Critical Variables in School Restructuring

Virtually all models of school restructuring practices include one or more of the following key reform components:

- Curriculum Revision
- Performance-based Assessment
- Decentralized Instruction
- School Autonomy
- Site-based Management and Budgeting
- Shared Decision-making
- Infusion and Coordination of Educational Resources
- Community Involvement

Curriculum revision. Traditional schools often rely exclusively on basal texts and workbooks that follow a prescribed sequence and format. Students are expected to memorize large quantities of facts and to repeat back in one format or another that which was taught to them. Under school restructuring reform efforts, more emphasis is placed on higher order thinking skills. Students are expected to use abstract reasoning skills to reformat the information that is provided to them and, in so doing, to think through the material and consider where elements of a topic fit into a bigger picture.

In their review of research on effective schools, Levine and Lezotte (1990) conclude that performance on higher order learning tasks should be examined separately from performance on mechanical skills, and that more emphasis should be placed on the former, particularly in the upper grade ranges. The emphasis on higher order thinking skills should not only extend to all students, except those students with severe intellectual disabilities, but in fact should be particularly stressed in the performance of chronically low-achieving students, a recommendation that goes against the grain of conventional wisdom (i.e., Levin, 1988).

Performance-based assessment. Traditional schools assess performance through standardized, school-wide tests and through normative performance on subject area measures (such as classroom puzzles, homework forms, etc.). Assessment in restructured schools is shifting in the direction of monitoring student progress individually (i.e., Borger, Lo, Oh, & Walberg, 1985; Ferguson, 1984).

For example, the State of California's school restructuring initiative, Every Student Succeeds (California Department of Education, 1990), draws a distinction between a "rule-based" system of accountability for the evaluation of school success, and a "performance-based" system. School success in a rule-based system is defined in terms of process-based, school inputs such as the number and type of various special programs and services that are available, personnel, staff ratios, scope and sequence of the curricula, quality of the instructional materials, hours of in-classroom time, and so forth. By contrast, under school restructuring processes, school success is evaluated in a performance-based system, where data are collected at the level of outcomes for individual students as well as the aggregate. Performance-based assessments examine whether students have learned the specified skills, knowledge, and attitudes that comprise the educational goals of the system.

Decentralized processes of instruction. The relationship of grouping arrangements to student outcomes in effective schools is complex, and there are no simple formulas for success (Levine & Lezotte, 1990). However, recent research in instructional systems that demonstrate particular success in outcomes from chronically low-achieving students and students at risk for school failure and drop-out include: (a) relying on a wide spectrum of school services personnel; (b) a variety of specialized learning opportunities during or even outside the regular school day; and (c) cross-grade grouping.

The data on homogeneous vs. heterogeneous grouping arrangements on the basis of ability reflect a complex pattern of results with no clear support for either direction (Levine & Lezotte, 1990). While tracking practices are clearly in retreat under school restructuring, the practice of "levelling" to

achieve certain goals is gaining in support. Levelling refers to the practice of classifying students at times into a few broad groupings or levels on the basis of their present performance standards (Levine & Lezotte, 1990). For example, levelling practices that provide intensive tutoring to assist students in reading ahead of the required performance standards in a heterogeneous group later on, is proving to be a particularly useful instructional approach with students who are at risk (i.e., Sizemore, 1985).

Various models of teacher consultation arrangements both in and out of the classroom are showing impressive results (Bauwens, Hourcade, & Friend, 1989; Idol, Paolucci-Whitecombe, & Nevin, 1986). These models put emphasis on the use of teams consisting of varieties of general and specialized teaching staff at the school site. These teams then structure plans for curricular and instructional arrangements to benefit low-achieving students. In addition, they identify and procure, where possible, specialized resources to benefit these students.

Cooperative learning strategies have a particularly rich basis of support in school restructuring arrangements (i.e., Johnson & Johnson, 1987; Slavin, 1989; Slavin, Stevens, & Madden, 1988), as do a variety of other peer-instruction, assistive models (i.e., Fogarty & Wang, 1982; Wang, 1989). Recently, cooperative learning and peer instruction practices have been demonstrated to be particularly facilitative of the inclusion of students with severe intellectual disabilities in general education classrooms and other fully integrated school settings.

The summative importance of instructional grouping arrangements in school restructuring appears to be most positively revealed in the creative



utilization of specialized resource personnel and of available space at the school site to allow each student to experience competence for some aspect of participation in a group product. These practices may be contrasted with the more traditional arrangement of "front end" instruction by a teacher facing rows of students at desks working in relative isolation. Students at risk clearly benefit from the smaller and more participatory grouping arrangements (i.e., Slavin, 1989).

Organizational autonomy for schools. Part of the reaction to the school accountability movement that gave rise to second-wave reform efforts has been the effort to win more autonomy and independence for individual school sites in the restructuring process. The argument here is if schools are to meet the challenge of more difficult populations and circumstances, then they must be freed from rigid bureaucratic constraints imposed by their relative position with respect to the central district office, the board of education, and the state educational agency (i.e., Skrtic, 1990). Schools must have the freedom to experiment, to reorganize, and to try new schemes in order to reverse the tide of mediocrity that has increasingly characterized school performance where children at risk are congregated.

School restructuring is, of course, primarily concerned with curriculum revision and improvement in teaching and support technologies, but these can only truly evolve in a context of revised school governance structures and school organization (Elmore, 1990). In this sense, restructuring is multifaceted and multi-tiered. Efforts presently under way by the states to engender restructuring on a large scale are characterized by increasingly functional standards of accountability and rewards, often through statewide,

discretionary grant processes, linked to improved school performance as judged through accountability data (Cohen, 1988).

The primary process of obtaining greater relative autonomy for individual schools is the vehicle of policy analysis (Sailor, Gerry, & Wilson, 1991). This process requires that a careful examination be conducted of state and federal statutes and regulations, state and local education codes, and state as well as local Board of Education policies and procedures, in order to determine the steps that may be necessary to effect school autonomy.

The National Governor's Association has produced the most detailed policy recommendations that have appeared to date on school restructuring (David, 1990; David, Cohen, Honetschlager, & Traiman, 1990). Many of the recommendations have to do with delineating sets of waiver requests that individual schools may employ in order to gain autonomy.

The importance of policy analysis in restructuring lies really in the effort to create sufficient flexibility within the systemic structures of school governance to allow the school to respond to serious challenges in new ways that may potentially represent radical departures from standard practices (Skrtic, 1990). Without the exercise of waiver authority, the degree of flexibility needed in all likelihood cannot be attained.

Site-based management and shared decision-making. The single most often identified hallmark of school restructuring is the principle of decentralized governance. The process of positioning a school for greater autonomy within the bureaucracy of the school district is step one. The second step of reorganization for greater flexibility within the school is the

central issue of site management and shared authority (Sirotnik & Clark, 1988).

Within the school site reorganization process, the term "site-based management" usually refers to changes in the role and responsibilities of the principal, and the term "shared decision-making" refers to a process of teacher empowerment in school governance. The end result of this reorganization is that the principal and teachers at the school have greater autonomy to operate the school budget and implement school programs (i.e., Cohen, 1988). Under a site-based management model, for example, a principal must possess the requisite competencies, credentials, and so on to perform effectively at least the following tasks:

- Manage and coordinate the total school budget;
- Negotiate successfully with the central district office for needed school programs and resources;
- Interact successfully with a school site council under shared decision-making authority;
- Hire, fire, and otherwise manage, supervise, and evaluate school personnel, including Special Education and other categorical personnel;
- Possess a working knowledge of the processes by which all categorical programs (i.e., Special Education, Chapter 1, Limited English Proficiency, Gifted & Talented, etc.) can be integrated, managed, and coordinated.

Often, principals involved in school restructuring need to seek out and procure additional inservice training and technical assistance in order to

assume tasks such as those listed above, which in traditional school organizational schemes are the responsibility of various administrators in the district central office.

On the other hand, the issue of shared decision-making is really the issue of increasing teacher motivation to make a new process work. Teachers often feel that they have seen various reform efforts come and go with relatively little chance on their part in how best to effect the changes. A body of research, however, suggests that teacher commitment and motivation is central to the success of school reform efforts (Cistone, Fernandez, & Tornillo, 1989).

Certainly one way to secure teacher "buy-in" to a school reform package is to turn the school over to the teachers and let them run it. The problem with that solution lies in the recent history of antagonism and mistrust that has arisen from the advent of collective bargaining in education in the face of scarce resources. From the school district's point of view, the problem is how to energize, enlist, and empower teachers without giving the proverbial store away (Skrtic, 1990).

The solution is the advent of teacher site councils. For example, Conley (1988) listed the following domains that must be directly influenced by teachers in a shared-decision model:

- Organizational resource allocation
- The allocation of work assignments among the staff at the school
- The curriculum process, including textbook selection, teaching methods, etc., and
- Professional-organizational relationship management,

including input on grading policies, staff hiring, transferring, and disciplinary procedures, etc.

The concept of teacher site governance councils has been around for some time and a number of different models have emerged, some with research behind them (Marburger, 1985). Issues of concern include the size and make-up of the council, the procedures by which teachers become members of the council, whether to include parents and/or other school personnel on the council, the frequency and duration of council meetings, and how these are funded; the role (if any) of the principal on the council, and the extent of actual governance authority to be exercised by the council (Sailor, 1991).

Obviously, the relationship of site-based management from the perspective of the principal to shared decision-making processes is a dynamic and sensitive issue at a restructured school site. The three key ingredients of (a) a strong and knowledgeable manager, (b) teacher empowerment, and (c) the interaction of those two processes in school management will determine the quality of "the stew." A flaw in one of the ingredients and the menu will be a failure. Certainly, public relations skills play an important role in school site shared-management models, both on the part of teachers and the principal.

Full infusion and site coordination of resources. Site-based management and budgeting can only achieve its potential as a reform agenda if all available resources for the education of the children at the school are under the dominion of the school site manager. The best and most highly motivated teachers working with the most advanced curriculum and with

effective teaching practices still cannot hope to reverse the processes that place students at risk for drop-out and school failure without adequate resources, particularly when class sizes are high. Many of those resources needed for the educational improvement of all children are locked up in categorical programs, including special education, which benefit a relative few.

The major policy issue confronting special educators and others under school restructuring is whether those students for whom categorical resources are targeted can have their specialized needs met in a manner that allows all students at the school to benefit from those programs as well (Sailor, Gerry, & Wilson, 1991). The current thrust within the field of special education is without question toward providing specialized services within the context of the regular classroom, and applying a much broader range of criteria to the identification and referral of students for special education services than a few standardized tests. Sailor, Gerry, and Wilson (1991) reviewed the literature and concluded that the preponderance of available evidence suggests that special education is a failure when viewed against the criteria that originally chartered the course set by the EHA in 1964. Fewer than 20% of children once identified and referred for special education programs ever leave special education programs, even though the categorical program was conceived as a remedial support strategy (Gartner & Lipsky, 1987). Additionally, the unemployment rate of special education "graduates" within three years of leaving high school is above 80% (Hasazi, Johnson, Hasazi, Gordon, & Hull, 1989).

A related body of research on the outcomes of separate special education programs versus integrated and mainstreamed programs for the

more severely disabled special education students was reviewed by Halvorsen and Sailor (1990) and Sailor and his colleagues (Sailor et al., 1989). The programmatic efficacy for even this population clearly and significantly favored services delivered in the regular educational setting, with the greatest proportion of positive contributing variance in these studies accruing to heightened motivation on the part of disabled students when given opportunities to participate interactively with regular children in a variety of general education instructional settings.

If special education in separate "pull-out" programs is a failure (i.e., Lipsky & Gartner, 1989) and, conversely, the success rate is demonstrably higher in regular program applications (i.e., Sailor, Gerry, & Wilson, 1991), then the question arises as to whether coordinating special education resources within the general education program might indeed benefit all students. For example, Slavin (1990) showed that special education students profited significantly in a range of educational outcomes from inclusion in cooperative learning groups at the elementary school level when compared with similar students in a special class situation, and without any loss to the regular students in the group. Wang (1988) found similar results in a comprehensive series of studies of the "Adaptive Learning Environments model," a regular education-based delivery system.

Finally, the question arises as to the legality of serving special education students in the educational mainstream. Gilhool (1989) provided a comprehensive review of the legal decisions that have shaped special education policy and practice, and concluded that, indeed, the mandate is

clearly in the mainstream direction. Only in a regular classroom setting, Gilhool concludes, can students labeled as "handicapped" receive the law's mandated "appropriate education" in the "least restrictive environment." The legal burden of defense is on educators who remove children from the mainstream, not those who choose to serve students in the regular program with appropriate supports. Examples in practice abound. In Minneapolis, the General Mills Foundation is funding a pilot project to eliminate pull-out programs in that city (Gold, 1988). The "New Futures" program in five U.S. cities funded by the Annie E. Casey Foundation exemplifies restructuring of this type as it affects special education and at risk students (Joe & Nelson, 1989). Finally, programs in school districts in Vermont, Delaware, California, Oregon, and Nebraska are actively restructuring schools at all levels to apply special education programs to all students so identified for services in general education settings (Lipsky & Gartner, 1989; Sailor, Gerry, & Wilson, 1991).

Is full "infusion" the same as full inclusion? Not quite. We use the term "full infusion" to mean coordinated administration and budgeting of all educational specialized resource programs, such as special education, Chapter 1, and Limited English Proficiency, at the school site under the terms of restructuring. A school could conceivably site manage these programs in relative isolation at the school, but then this would defeat the purpose of resource integration for the benefit of all. In our view, inclusive education for students with all ranges and types of disabilities is implied in the concept of resource infusion and site coordination.



### Enhanced Community Involvement in the Life of the School

The final element of school restructuring of direct concern for the education of students with severe disabilities has to do with community involvement. The issue here is to what extent can the school successfully regain its all-but-lost status as a fundamental mainstay of the community it serves (Sailor, 1991). This component has a particular relevance for the potential of its impact on children at risk for school failure and drop-out. The work of Reginald Clark (Clark, 1983; 1989) represents a case in point. Clark developed strategies to involve the families, single parents, and foster care providers of African-American children in predominantly poor, multi-ethnic, minority school districts, in their children's academic life in the school. His efforts, particularly in math and reading through involvement in homework, paid off in greatly improved test performances of his subjects and reduced status for being at risk. Clark (1989) was able to show that illiterate parents can nevertheless stimulate a child's reading and writing skills through focusing the child's attention on stories invented by the parents to non-word picture story books.

Among the factors most closely associated with high-school drop-out has been the perception of school as a relatively valueless place in the eyes of families of children at risk in earlier grade levels (i.e., Council of Chief State School Officers, 1989, b). If school is a place where children of poverty are viewed negatively by teachers and administrators, and where parents are held accountable for these perceived problems by being furnished with detention slips, requests to come in for disciplinary discussions, threats of suspension, etc., then parents will come to view the school as mainly a

place of bad news and harassment. Such a view is soon communicated to the child and the school comes to have a negative value.

Where the rhetoric of the first wave of educational reform held that schools could not be expected to make up for societal inequities and deficiencies, and that parents must be held accountable for values transmission and parental authority, there is now an increasing awareness that the school may indeed have to diversify its services to its child constituents. The ravages of poverty and its side affects, such as drug abuse, malnutrition, teen pregnancy and juvenile justice encounters cannot be ameliorated with rhetoric, and in many cases the school is the only point of contact with the entire service system network as it bears on children (Council of Chief State School Officers, 1989, a).

Community involvement is required, as a key component of restructuring, in such diverse areas as improved health care for young children, provision of preschool and infant support services, case management and child protective services, parent involvement in school decision-making councils, community volunteer participation in middle and junior high schools, and the involvement of business and industry in the process of transition from school to adult status at the secondary school level. This list taps but a few of the significant ways that members of the community can enhance the life of a school under restructuring in ways that are likely to have a very substantial impact on educational outcomes for students, particularly students at risk for failure and drop-out.

The work of James Comer (1987) and Lilly Wong Fillmore (1991) illustrate restructuring efforts with demonstrable payoffs in community

involvement-related outcomes. Comer's model is geared to bonding families of poor and multicultural children to the school site by increasing the use of parents as instructional aides and infusing parents into governance committees at the school. Fillmore develops ways to bridge the gap between the culture of the school and families of LEP children, as well as poverty-level white and nonwhite English speaking families. Fillmore's techniques are geared to acquainting school personnel with the culture of the children's families and their learning styles. Her work is particularly significant in research-based outcomes with children of Asian immigrant families whose children are often unaware of the cultural expectations of the school milieu.

Family involvement as a primary variable in the community involvement component of restructuring goes way beyond simple increased attention on the part of family members in school functions. Heleen (1988) offers a model for conceptualizing family-school relationships that is grounded in organization theory. He proposes using a number of "gates of entry" geared to a family member's level of skill, need, or investment. One such gate is offered, for example, through structuring school-of-choice programs. Volunteer organizations offer another gate of entry for some families.

Community involvement at the high school level is heavily focused on the foundation of new partnerships between business and industry and the schools to facilitate the transition of students into adult status. Central to high school restructuring around transitional services is the regrouping of traditional vocational educational programs (i.e., Kadamus & Daggett,

1986). Examples of restructuring in high schools in Boston (Dentzer & Wheelock, 1990) and in New York (Kadamus & Daggett, 1986) indicate how vocational education resources can be effectively reorganized to facilitate the movement of students into the workplace or into higher education through partnership arrangements between high schools and business and industry councils, or between high schools and higher education agencies.

Integrated learning environments, for example, can provide a vehicle for blending community and school resources into a common planning framework that has a significant, measurable impact on the reduction of high school drop-out (Fillmore, 1991; Flynn & Kowalczyk-McPhee, 1989). Collaboration between high schools and such agencies as the Department of Vocational Rehabilitation (DVR) and Department of Developmental Services (DDS), together with business and industry groups, has led to recent strong movements in vocational education to create direct job experience in career employment opportunities for high school students (i.e., Siegel, 1988; Siegel & Gaylord-Ross, in press), and the creation of "transition specialists" within high schools whose jobs call for the development of career-linkage plans for categorical students and students at risk for drop-out (Sailor et al., 1989).

Responding to the multiple and diverse needs of students at risk and those with disabilities requires schools in the process of restructuring to shift, to some extent, the very conception of the school's role in the society. One aspect of this shift deals with expanding the role of the school to include the provision of comprehensive, school-based services as one aspect of increased community involvement. These services are comprised of an

array of health, social services, and educationally related services, brought together in a coordinated delivery system and provided to students at the school site.

Service integration as social policy has been developing in response to the fragmentation that presently exists in the array of services provided to our nation's children at risk and their families – most specifically those living in poverty. The current delivery system requires that the multiple needs of children be separately addressed by each agency charged with that particular service responsibility. Since each agency is guided by a different set of rules, regulations, eligibility criteria, professional certifications, philosophy of service delivery, and funding, the net result is a highly program-driven and fragmented set of services. The impact on the child and his or her family may be that in order to receive a necessary service, eligibility for and transportation to a number of different agencies must be accomplished. Gardner (1989) discusses the problem in terms of the "fragmentation dilemma." Citing the case of "Ricardo," a chronically underachieving teenager who was often absent from school, whose family was riddled with child abuse, substance abuse, and criminal records, he found that the family was being served by at least nine different agencies, but with no agency possessing responsibility for Ricardo, and no coordination among the various programs offered to the families through these agencies.

Navigating the system is difficult and the result is that all too frequently the children most in need often receive the least amount of service. Therefore, a great many of our nation's children are underserved.

The impact of this fragmented system is chronic failure and under-performance in the schools by large numbers of children who are too ravaged by the effects of poverty to benefit from public education.

The Basis for a Shared Educational Agenda: General Education and Special Education in School Restructuring Efforts

In response to these undeniable and growing problems, alternative service delivery models, known as "service integration models," are emerging which seek to address the fragmentation, access, and duplication of service problems which characterize the current system.

In one of the most comprehensive analyses of the service system dilemma as it affects children to appear to date, the Education and Human Service Consortium in the publication, What It Takes: Structuring Interagency Partnerships to Connect Children and Families with Comprehensive Services (Melaville & Blank, 1991), presented five root causes of the failure of our present social service system. These are:

1. The services are discrete, programmatic, and crisis oriented;
2. Problems of children and of families are divided into rigid and distinct categories that fail to reflect the inter-relatedness of their causes and solutions;
3. There is little and sometimes no functional communication among the public and private sector agencies that comprise the system (see also Kirst, 1990);
4. Staff of specialized agencies cannot easily craft solutions to complex problems that cut across multiple disciplines, and

5. The existing fragmented service system components are each underfunded so that many children and families fail to benefit from even the piece-meal approach.

Furthermore, Melaville and Blank (1991), suggest that the key elements of a system which addresses the inadequacies of our current model is one which:

1. Provides a wide array of prevention, treatment, and support services that are comprehensive in scope;
2. Is a comprehensive service system that ensures that children and families actually receive the services they need (e.g., a single point of contact characterized by a structure for case management and service collaboration);
3. Is typified by a holistic focus on the whole family;
4. Is a system that empowers families and children and helps them to be responsible for planning their own service needs; and
5. Includes a method by which the outcomes of service intervention and their impact on children and families can be measured.

Special education and general education have each undergone extensive reform efforts over the past decade. Until very recently, these efforts have had little in common with each other and may, in fact, have increased the extent of separation in the two endeavors. Most recently, however, the dominant trend in policy reform within general education, i.e., restructuring, has placed emphasis on organization and governance issues at the locus of the school site. This effort has arisen from the growing perception that school system organization is ill-equipped to cope with the

demands placed on it by a changing demography characterized by a greater diversity among the nation's collective student body.

In special education, reform efforts have been concentrated on the achievement of greater levels of integration for students with disabilities, particularly in recent years, on the full inclusion of students with severe disabilities in general education classrooms. Rather than requiring students to perform at normative levels on subject matter within grade levels, these reform efforts have tended to emphasize curricular and technological adaptations that allow for partial participation in the curriculum of the general education classroom.

Similarly, students with less severe disabilities, i.e., learning disabilities, are retained to a larger degree in the general education classroom as an outgrowth of this reform trend. The utilization of pull-out strategies, such as resource room and separate classes for these students, is discouraged within the reform agenda.

Within general education, reform efforts have shifted in the last few years, from a strong emphasis on improvement in curriculum and instructional methods, to a primary concern with how schools are organized and governed within the larger systems represented by the school district and the state education agency. Since enhanced integration of special populations at the school site necessitates a reorganization of how personnel and space issues are to be resolved at the school (particularly against a backdrop of full inclusion of students with severe disabilities), to at least that extent, there exists an opportunity for a "shared educational agenda" to emerge as a basis for comprehensive school reform (Sailor,



1991). The implications of a shared reform agenda are particularly auspicious for families seeking a program of full inclusion for their children with disabilities. Special educators can only gain so much ground in an effort to more fully integrate special education students if the general education powers-that-be resist the effort. Corresponding problems result if general education is perceived as "raiding" or ripping off special education resources to benefit student populations that have not been identified for special education. For the full realization of comprehensive integration, the entire educational program must work as a single, coordinated effort at the school site level. School restructuring is, at present, the logical policy vehicle with which to drive this shared agenda.

Up to this point, we have examined the broad basis of contemporary school reform policies for establishing a fully inclusive program for students with severe disabilities in regular public schools. In the next section, we examine the actual implementation of fully inclusive programs in restructured schools, and discuss some of the kinds of educational practices that are emerging in these schools.

Thus far, instances of full inclusion have been, for the most part, the result of administrative policy to desegregate centers for students with severe disabilities (Sailor, Wilson & Gerry, 1991), bring students back to their home schools from long distance transportation to clusters (Kirst, 1990; Thousand & Villa, 1989), or a general move to an effective school model which uses a zero exclusion and "every student succeeds" approach (Mamary & Rowe, 1987).

Whether the move has been spurred from a "bottom-up" approach or a "top-down" approach, individual court cases, or a combination of the above,

some of the key processes that cut across the success of these models are common to each: school-site team collaboration and planning; administrative commitment to an individual outcomes driven model; and competent, informed teachers and staff who are willing to collaborate to meet the needs of each individual within integrated classrooms as well as the community regardless of the severity of the students' disabilities.

### The Comprehensive Local School : A Framework for Inclusion.

The Comprehensive Local School (CLS) is a particular approach to service delivery developed by the California Research Institute at San Francisco State University (Sailor et al., 1989). This approach incorporates the assumptions of best practices for inclusive classrooms and community-based instruction with the delivery of those services based at the school the student would attend if he or she were not disabled, or the school of his or her family's choice if a choice model exists for students without disabilities. The CLS model provides a framework from which to base the delivery of fully inclusive special education services through specified practices addressed to each of five different core groupings.

1. Mainstreaming, which encompasses day care, preschool, and kindergarten populations. The defining characteristic of this grouping is complete inclusion with typical children, including the transition from preschool to kindergarten;

2. Integration, which addresses the needs of students with all ranges and types of disabilities in Grades 1 through 5. Again, this grouping calls for full inclusion and membership in the age-appropriate, general education classroom with some time in other integrated school

environments, as needed, or as called for by a lack of opportunity to engage in interactive participation in the general education classroom curriculum;

3. Community intensive instruction, which addresses the middle school/junior high school group. This grouping calls for a mix of inclusive education in general class participation at the school, with increasing instruction in a variety of community-based school and nonschool settings for students with severe disabilities who require in situ instruction to generalize new skills to functional settings and opportunities;

4. Transition, the high school years, which calls for the development of an Individualized Transition Plan (ITP) at age 14 that is updated annually until "graduation." The transition period introduces a strong component of instruction in work training sites, mixed with community living skills in situ, and domestic living skill instruction. Again, the effort is to balance integration and school site inclusive education with functional skill development; and

5. Supported living, which addresses the post-transition years to community living and adult status. The CLS model examines ways that the public education system can track and follow through with students/clients placed in community settings with postschool supports (i.e., supported employment) between the ages of 18 (graduation) and 22 (the maximum age in many states for support under PL 94-142).

The CLS model provides a framework for inclusion that builds on the previously documented effectiveness of integration and community-based instruction. Inclusive schools and classrooms are the logical "next step" to

the best practices described earlier under the title "categorical, community-based instruction."

Thus far we have examined the basis for fully inclusive educational placements for students with disabilities in the context of contemporary educational reform. We have defined "full inclusion" in terms of emerging educational practices and have provided some descriptions of the kind of infrastructure necessary to implement these kinds of programs. In the remaining section, we examine some of the current strategies and tactics that have emerged to date in the implementation of these kinds of programs, returning briefly to our case of "Holly," with whom we opened the chapter. Later chapters in this book, particularly Chapters 3 and 4, will return to fully inclusive educational programs and provide finer levels of examination and analysis of their implementation with a variety of school-age groupings.

#### Designing the Individual's Curriculum Within the General Curriculum

As stated earlier, in an inclusive model the individual's needs and desired educational outcomes shape the goals and objectives, selected for instruction without limiting or precluding the students' participation in the general education program. Similarly, the general education and community settings chosen as the learning contexts for the student also shape the way in which the goals and objectives are written. The contexts for instruction are referenced to the student's same-age peers and are selected for their motivational and socially integrative value. Increasing bodies of research demonstrate that the design and analysis of motivating instructional contexts and the careful delineation of instructional opportunities within those

contexts are a vital part of the instructional strategy for a wide variety of skills (Downing & Eichinger, 1990; Ford & Davern, 1990; Gee, Graham, Oshima, Yoshioka, & Goetz, in press, a; Gee, Graham, Sailor, & Goetz, in press, b; Gee, Graham, Lee, & Goetz, 1991; York & Vandercook, 1989). A primary task for the special educator, then, is to identify and analyze the contexts of the student's same-age peers, and to delineate how, when and where the instruction of new skills will take place within those contexts. A second, and equally important, task is to facilitate the social integration and interdependence of the student within those contexts.

Several authors have recently described individual service delivery planning processes which have been successful in fully inclusive systems (e.g., Ford & Davern, 1990; Gee et al., in press, b). Figure 1 depicts, and the sections below describe, a curriculum process which teachers can utilize to implement an inclusive model. This process is detailed in Gee et al., (in press, b).

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Insert Figure 1 about here

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Since the IEP process varies from school district to school district and from state to state, no attempt is made to conform to one particular standard. Our experience indicates, however, that certain primary steps can be delineated:

- Assemble the student's planning team: Include at least the student, his or parents/guardians and family members, close friend(s), and general and special education staff. The team may

also include other peers, coworkers, related service personnel such as physical or speech therapists, a nurse, etc.

- Get a student profile and a set of priorities: What are the student's and families preferences, the student's strengths and needs, and initial priorities? At this point what types of learning activities are particularly motivating? What are the students learning styles? Given placement in a general education classroom what types of teaching methods are particularly useful? Are there other nonclassroom/school activities of priority? Are there activities in the community which are of priority? What are the skills/educational priorities which should be the focus?
- As a team, design an action plan.
- As a team, design an integration plan.
- Conduct a contextual assessment and performance analysis
- Conduct in-depth assessments of particular skill/curricular areas as needed.
- As a team, balance the general education classroom contexts and other school and community contexts according to need.
- As a team re-evaluate and finalize instructional objectives and the contexts in which they will be instructed.
- Design instructional strategies to teach objectives.
- Team coordination of instructional delivery and training of all staff.
- Facilitate peer support networks.

- Facilitate friendships and social circles.
- Facilitate participation in integrated after school activities.
- Conduct ongoing evaluation and program revision.

#### Determining Initial Priorities.

In preparation for the first team meeting each of the team members (including parents, family, nondisabled friends and coworkers, professionals, etc.) typically conducts his or her own qualitative and summative inventory of the student's strengths, needs, and preferences. The student's learning styles are summarized as well as information regarding the student's previous school integration and community experiences, age-specific program issues, strengths and needs in specific functional curricular areas, and strengths and needs in basic skill areas.

Prior to the meeting the special education teacher also reviews the general education school life, contexts available for participation within the school as a whole, community sites available for instruction and accessible to students, and the general classroom which has been chosen for the student. The general educator who will be receiving the student as a member of his or her class observes the student, then reviews his or her own class schedule and prepares an outline of the class activities, typical schedule, and curricular approaches.

If the student has been served in a general class placement in the previous school year, more information will exist related to the student's ability to follow classroom routines, socialize with the other children, be a group member, etc. The general education teacher will also have more specific input on the student.

At the team meeting participants share their visions and their concerns as well as their priorities for improving the student's quality of life. Information is summarized for all team members, verbally and in written form. Various methods of team participation exist (Strully & Strully, 1989; Vandercook, York, & Forest, 1989; York & Vandercook, 1989). In some teams each member verbally reviews his or her priorities and concerns. In other teams, one professional summarizes the priorities of the educators and therapists involved. A primary rule in any team process, however, is that the parent, or guardian, is given first consideration in stating the student's strengths, needs and educational priorities. Student participation in the team process and the participation of the student's friends, coworkers, and advocates has also changed the dynamic of the traditional IEP. The purpose of this initial team meeting is twofold: to design an action plan and an integration plan.

#### Designing an action plan.

The action plan is a contextual assessment and participation plan which delineates (a) the initially chosen contexts and activities in which the student will be assessed and eventually receive instruction; (b) the educational priorities (tentative objectives) initially chosen by the team; and (c) the related services necessary to support the student. If the student requires a specialized health care delivery plan, arrangements are made to expedite that plan. If any specific in-depth assessments are needed, such as a communication assessment or functional vision assessment, the team designs a plan for these to be accomplished.



Educational contexts. The contexts and activities selected for assessment and instruction consist of the general education teacher's(s') class schedule(s) of daily activities and other school and community contexts which are expected to be used regularly and/or those particularly motivating for the student (such as the cafeteria, the locker rooms, the gym, the yard, a local shopping center, worksites, etc.). This is, essentially, a tentative schedule of contexts and curricular periods throughout which instruction may take place. In an inclusive model each general class teacher's entire schedule is initially included in the context schedule for the student with severe disabilities. For elementary school students the general class schedule will form the largest portion of the student's schedule with adaptations and alternatives in curriculum individually designed and additional school and community activities identified. For secondary students there will be a general class homeroom placement and, depending on the student's team decisions, a general class schedule resembling that of nondisabled peers is balanced with instruction in other school contexts, school jobs, job rotation sampling in integrated real work placements, and community instruction.

Students without disabilities gradually increase the number and variety of environments in which they are expected to be competent. Utilizing the best practices described above, the teaching activities used to instruct new skills to students with severe disabilities should reflect the same range and variation as the environments and contexts in which their nondisabled peers learn and function. From the infant service delivery program to the adult service delivery program, the environments and contexts in which these students receive their instruction should increase and

expand from the home, to the general classroom, to the school at large, to the community and integrated work environments (Sailor et al., 1989).

The move to full inclusion vs. integrated special class models sometimes makes the balance between time spent at school and time spent in the community confusing for professionals. Numerous positions exist as to the amount of time which should be spent in the community vs. the integrated classroom and school environments for students in various age groups (Brown et al., 1991). Teachers of secondary age students particularly struggle with this issue as they seek to maintain social relationships, increase social interaction skills, and prepare students for real jobs in the community.

The CLS model suggests a gradual increase in the amount of time spent in the general school settings vs. the general classroom, and the community vs. the school as students get older. Unfortunately many programs give up a substantial amount of integration as they add community environments to their curriculum, and it is not uncommon to find students in middle and high school programs spending large amounts of time in school and community settings in which no nondisabled peers or coworkers are present. The PEERS Project has suggested a decision model for balancing classroom, school, and community time for secondary age students. This decision model asks the team to look at several factors to individually determine community instruction time vs. school instruction time, including: the student's age, parent/sibling preferences, student preferences, effect on personal relationships, student ability to generalize, functional skill needs, prior history, availability of relevant school/community environments, use of community facilities, general class and similar school experience to siblings

and nondisabled peers, friendships, personal hygiene needs, home skills, recreation skills, vocational skills, mobility skills, safety and health.

The primary guidepost for the teacher to use is the previously identified best practices matched to the educational priorities of the individual student. Preparation for the world of work and adult supported living takes a balance between time with nondisabled peers acquiring important social and interactive skills and friendships, time spent learning specific curricular objectives and personal management skills, and time in various job opportunities identifying jobs which are most preferred and accomplished best by the student. As students who have been integrated and included in the general education program since preschool reach secondary programs, however, it is predictable that they (and their parents) will not wish to sacrifice the close friendships and peer support network, or the motivation, generated by inclusion in the general education program. The contextual and cooperative instructional methods and the coworker support strategies described above, which are increasingly present in general education classrooms and integrated work settings, will be of increasing interest to these families and their educators.

Educational priorities/tentative objectives. Educational priorities are chosen based on the input from all team members. If the student has not yet had the opportunity to be included in a general classroom, or if this is the first time he or she will be receiving instruction in a real work setting, the outcomes identified will be different from those of a student who has had numerous work opportunities or previous full general class placement.

These objectives may change, be deleted, or be added to, after the teacher and other team members have assessed the student within the contexts identified.

The team also negotiates the supports which will be necessary from other professionals and instructional staff in order for the student to benefit from his or her educational plan. A related service delivery plan is designed, and at this time team members coordinate participation in assessments to be completed in the identified contexts. The team also begins to coordinate a service delivery plan (i.e. who will be responsible for the delivery of instruction and program monitoring in various contexts and objectives). If a specialized health care service delivery plan is needed, the team designates a timeline for its full operation.

Use of the action plan and a timeline. The team uses the action plan to start the school year for the student and sets a timeline for the program development process to be completed and a date for the second primary team meeting. Figures 2 and 3 depict a student profile and action plan for Holly, the second grader described early in this chapter. Holly's plan is defined by the second grade schedule as well as a list of skills that the team initially targeted for instruction. The team will assess and identify curriculum for Holly within each of the instructional contexts selected.

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Insert Figures 2 and 3 about here

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#### Designing an integration plan.

At the first primary team meeting an integration plan is also developed to facilitate the student's integration into the general classroom and any other

school and community instructional contexts. The team determines the supports for integration which will be facilitative of social interaction and peer support networks and lists the strategies which will be used to facilitate integration in various contexts. These strategies may range from general ability awareness education and curricular infusion to specific social support strategies such as circles of friends, to buddy systems, cooperative teams, and coworker support strategies. By committing to these strategies as a team, there is a group recognition of the support and facilitation necessary to make integration and inclusion in the classroom, school, community, and workplace successful (see Thousand & Villa, 1989, for a review of these types of strategies).

#### Conducting a Contextual Assessment and Performance Analysis.

Conducting a contextual assessment provides the team with a common framework or reference from which to plan the curriculum and teaching strategies for the target student with severe disabilities. The special education teacher with primary responsibility for the student's program works with other team members to analyze the student's ability to use known skills as well as to identify places to teach new skills within each learning context (i.e. each class period, non-classroom activity, or community activity).

The teacher begins by analyzing the typical learning routines within each class period or context and the natural cues and consequences which are available to the student given his/her sensory and physical capabilities (Downing & Eichinger, 1990; Gee et al., 1991). A period of "context instruction" and rapport building is provided during which the student is assisted to become familiar with the typical routines and expectations of the

activity (Gee et al., in press, b). The team then makes recommendations on the following areas: skills which could be instructed or practiced within the activity; curricular, physical, and support adaptations needed; and additional assessment needed on specific skills. The team also looks at changes in the activity or lesson design that might facilitate increased participation and numbers of instructional opportunities for specific skills. Integration interventions are suggested and, if necessary, suggestions are made for alternative activities.

To assist in these decisions, a more precise analysis is done in several contexts (a contextual performance analysis) in order to get a specific picture of the student's learning styles, means of receiving information and outputting information, the types of assistance required, the student's ability to initiate and to perform, the opportunities for interaction and use of communication skills, and the critical moments for instruction of a variety of skills (Gee et al., 1991). Chapters \_\_\_ and \_\_\_ of this book focus on assessment in more detail.

Figure 4 depicts a sample of some of the team recommendations for Holly in the second grade. During math, it was determined that Holly would focus on the following skills: grasping, holding on to materials while assisted to use them, activating an electronic score card, exchanging materials by pushing items toward a person when given a touch cue, using her communication device, and orienting to the interactions of her peers. It was decided that consistent groupings for Holly during the math stations would be facilitative of peer support and interaction, and that additional information was needed on her switch access as well as her ability to tactilely

discriminate the different students. The need for adaptations such as the math game electronic scorecard, adaptive handles for particular games, and partner/peer supports for getting the materials to Holly and setting up opportunities for her participation, was also identified.

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Insert Figure 4 about here  
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Re-evaluation and finalization of instructional objectives and points of instruction.

After the team has had an opportunity to evaluate the student's participation and instructional needs in each context, the second team meeting occurs. At this time the team members review the target skills initially identified and any new skills that have been identified as priorities as a result of the contextual assessment. The team reviews the number of opportunities to instruct the student on priority skills. If there are skills for which opportunities are few, the team re-evaluates the priority for the skill and whether or not new activities or contexts need to be explored in order to provide enough instruction. Sometimes skills are dropped from the priority list because, after the assessment process, the team members see little need for a focus of instruction on a skill which is not used or naturally supported by functional activities in the student's preferred schedule.

Many times additional opportunities for instruction can be "arranged" within existing contexts by making adaptations in the activity itself, the groupings, the materials, or the expected outcomes. Sometimes alternative activities can be arranged within the general classroom, such as providing a

math workshop for all students to rotate through while the teacher is using a more didactic approach. Alternatives can also be developed outside of the general classroom, such as the milk delivery activity for Holly. This check-and-balance process continues throughout the year to ensure that optimum use is being made of the activities and contexts within the general education program. The same check-and-balance process occurs within the community-based activities and the activities in the general school setting, so that maximum instruction and facilitation of skill development and friendship development is ensured.

Instructional design, delivery, and measurement.

The next step in the process is to design the instructional strategies, facilitation strategies, and adaptations to be used within each setting. Curricular adaptations will be ongoing as themes, projects, and activities change within the general classroom settings. Teachers currently involved in these programs typically target a general set of objectives to be taught within each setting/class period and then a set of objectives to be taught incidentally as the opportunities arise. Weekly adaptations to fit themes may be necessary by one of the support persons (special education teacher, assistant, therapist, etc.) and daily flexibility on the use of a variety of materials and activities to teach specific skills is essential. The staff working directly with the student and the peer or coworker support teams will need direct assistance to understand the means with which to give the student information, the means with which the student will output information and the objectives targeted for instruction.



Figure 5 depicts a matrix of the daily schedule and instructional objectives that were developed for Holly. The matrix identifies the activities/class periods in which each objective was instructed, and whether the instruction was on a planned, incidental, or variable basis.

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Insert Figure 5 about here

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Team coordination of instructional delivery across contexts and training of staff is one of the most important, and often most challenging, aspects of inclusive program design. The team must decide which educator will take the primary responsibility for implementation of the student's IEP. Most often the role is provided by one of the special education teachers. That person is responsible for the implementation of the instructional objectives but not for all the direct instruction. The team coordinates the level of staff support (whether instructional assistants, therapists, or special education teachers) balanced with peer support and support from the general education teacher. Some students will need more support or assistance than others, but each student's program plan must be looked at individually to determine the level of support for his or her education in each context. The student's team coordinates with the site resource team (see above) in order to plan for instructional delivery and staff ratios relative to the other students who need support.

Measurement of student progress and outcomes of the inclusive program are vitally important to its success. Consistent data collection (as described in chapters \_\_\_ and \_\_\_\_\_ of this book) on the achievement of

IEP goals and regular re-evaluation of curricular adaptations and instructional strategies (see Chapters \_\_\_ and \_\_\_) are an essential part of the success of any educational program.

Setting up peer support networks and facilitating friendships.

A final aspect of the individual's service delivery plan is the facilitation of peer interactions, friendships, and peer support networks. A detailed description of these strategies is beyond the scope of this chapter, but the facilitation of interactions and friendships between students with and without disabilities requires at least the following key factors: (a) consistent, planned educational and leisure time together; (b) facilitation of interactions between students -- assistance to initiate and respond to interactions, maintain and terminate interactions; (c) provision of information to peers and facilitation of problem solving efforts to include and support the student with disabilities; (d) ongoing modelling of positive supports and ongoing communication with circles of friends, (e) provision of instruction and competent means of participation for the students with disabilities within the activities of their same-age peers, and (f) active assistance to develop friendships within and outside of school.

We have consistently referred to the notions of peer supports, reciprocal teaching, peer tutoring, cooperative learning and coworker support in the pages above. Successful inclusive educational models utilize these approaches as a means for increasing problem solving and critical thinking skills, as well as interpersonal relations skills and general group work skills. Classroom strategies to bring students together around a common theme, with divergent instructional objectives, provide a framework for peer

networks and circles of friends (Forest & Lufthaus, 1989; Stainback & Stainback, 1992).

Villa and Thousand (1992) provide a review of strategies emphasizing "peer power" in a chapter on student collaboration. Their work and the work of educators developing themes of cooperation and reciprocity (e.g., Brown & Campione, 1990; Johnson & Johnson, 1990) will no doubt provide a strong emphasis in education in the 21st century. As social and interpersonal skills for all students are increasingly seen as valued educational outcomes for the general education student population, the instruction of social skills and facilitation of friendships and peer supports for students with severe disabilities will be more easily incorporated into the overall themes and curriculum of the general education program vs. added as an extra-curricular activity.

Interventions and strategies for working with heterogeneous groups of students can be found in the many references cited above. Chapters \_\_\_\_ and \_\_\_\_ of this book focus on the instruction of social and communication skills for students with severe disabilities.

### Summary

In this chapter we have focused on the full inclusion of students with severe disabilities in the general education program. We have approached this discussion from a perspective on school reform efforts in both general and special education. We began with a broad review of contemporary educational reform and an analysis of the role that special education best practices can play in the restructuring of our schools in ways that benefit all children.

In this context, we described features of the Comprehensive Local School, a model that contains the key elements of school restructuring, including coordinated, school-based services and state-of-the-art practices in educating students with severe disabilities. We examined various Indicators of overall program design with reference to key educational practices designed to benefit a diverse range of students. A number of factors that are felt to promote the success of an inclusive model for individuals with severe disabilities were described, as well as a model for program design which incorporates systematic instruction of target objectives for students with severe disabilities into the general education curriculum. Finally, we examined a number of these reform and programmatic issues in the context of the case of "Holly," an elementary school student with severe intellectual disabilities making a transition from one form of integrated education, a special class in a regular school, to the highest form of integration, full inclusion in her regular second-grade class.

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Author Notes

<sup>1</sup>Preparation of this manuscript was supported in part by the U.S. Department of Education Office of Special Education & Rehabilitative Services with a Cooperative Agreement to the first and third authors (#GOO87C3056) and by a grant from the Office of Special Education Programs (#H086G003) to the second author. No official endorsement should be inferred.

Table 1

Inclusive Education Supported Education

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The following characteristics are indicators of fully inclusive programs for students with disabilities. They are meant as guidelines in planning for full inclusion and also as a means for maintaining the integrity of the term, Full Inclusion.

1. Students are members of chronologically age-appropriate general education classrooms in their normal schools of attendance, or in magnet schools or schools of choice when these options exist for students without disabilities.
2. Students move with peers to subsequent grades in school.
3. Disability type or severity of disability does not preclude involvement in full inclusion programs.
4. The special education and general education teachers collaborate to ensure:
  - a. The student's natural participation as a regular member of the class
  - b. The systematic instruction of the student's IEP objectives
  - c. The adaptation of core curriculum and/or materials to facilitate student participation and learning.
5. The staff-to-student ratio for the itinerant special education teacher is equivalent to the special education class ratio and aide

Table 1 (continued)

- support is at least the level it would be in a special education class.
6. Supplemental instructional services are provided to students in classrooms and community sites.
  7. Regularly scheduled collaborative planning meetings are held with general education staff, special education staff, parents and related-service staff in attendance as indicated, in order to support initial and ongoing program development and monitoring.
  8. There is always a certificated employee (special education teacher, resource specialist or other) assigned to supervise and assist any classified staff (e.g., paraprofessional) working with specific students in general education classrooms.
  9. Special education students who are fully included are considered a part of the total class count for class size purposes. In other words, even when a student is not counted for general education ADA, s/he is not an "extra" student above the contractual class size.
  10. General ability awareness is provided to staff, students and parents at the school site through formal or informal means, on an individualized basis.
  11. Plans exist for transition of students to next schools of attendance in full inclusion situations.

Table 1(continued)

In summary, all students are members of the general education classroom, with some students requiring varying levels of support from special education. Hence the term "Support Education". This term, though synonymous with "Full Inclusion", is explicit in acknowledging the importance of providing support services within the regular classroom, when necessary to ensure a quality educational program.

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Figure Captions

Figure 1. Flowchart of the educational program planning process (from Gee et al., 1991).

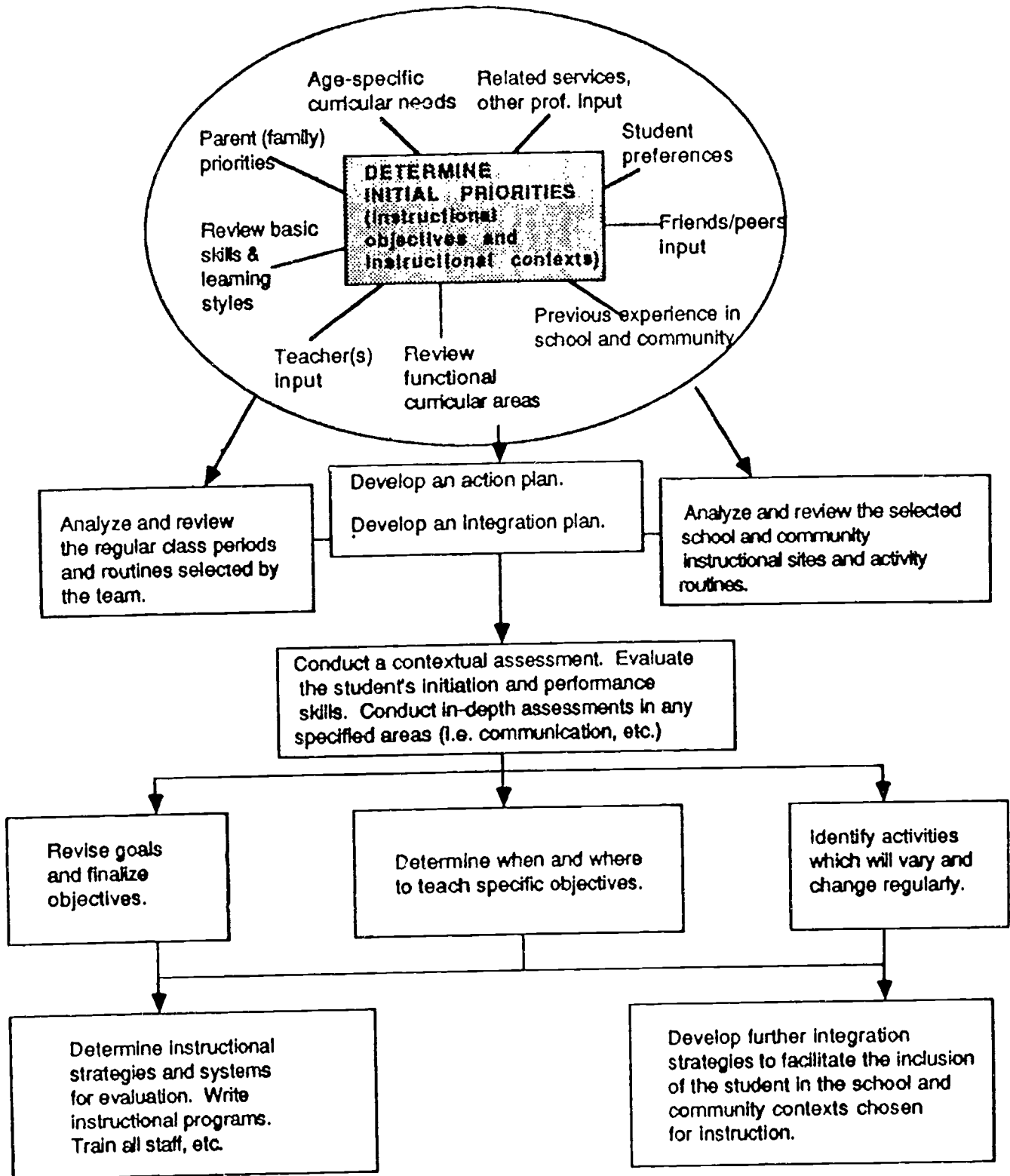
Figure 2. Holly's team priorities.

Figure 3. Holly's action plan.

Figure 4. A section of Holly's team recommendations.

Figure 5. A matrix of Holly's schedule and where her targeted objectives were instructed.

## THE INDIVIDUAL PROGRAM PLAN: WORKING WITH THE TEAM



Name: Holly  
 Grade: 2nd 7yr

Dates information was gathered: \_\_\_\_\_

### INITIAL SUMMARY OF PRIORITIES

PARENTS/FAMILY	STUDENT PREFERENCES
<ul style="list-style-type: none"> <li>• friendships w/ND peers</li> <li>• interaction skills</li> <li>• means to communicate</li> <li>• spend time in regular classes</li> <li>• have lunch and recess with ND peers</li> <li>• use her hands more</li> <li>• a way to participate in more household tasks</li> <li>• games to play with siblings</li> <li>• better wheel chair</li> <li>• eating out, going on family outings</li> </ul>	<ul style="list-style-type: none"> <li>• soft stuffed animals</li> <li>• gentle physical assistance</li> <li>• doesn't like new routines</li> <li>• chocolate ice cream</li> <li>• doesn't like milk</li> <li>• Big Mouth Singers toy</li> <li>• buzzing/vibrating toys</li> <li>• doesn't like new foods</li> <li>• likes Mom &amp; younger brother especially in the family</li> <li>• likes riding in the car</li> </ul>
FRIENDS/PEERS	TEACHERS/OTHER STAFF
<ul style="list-style-type: none"> <li>• "spend more time with us"</li> <li>• "play more games"</li> <li>• "come to skate night"</li> <li>• "use the computer"</li> <li>• "not cry so much"</li> <li>• "eat better"</li> <li>• "tell us what she wants to do"-- choices</li> </ul>	<ul style="list-style-type: none"> <li>• new wheel chair</li> <li>• communication system (evaluate)</li> <li>• control of environmental devices</li> <li>• self-care: eating, drinking, washing, etc.</li> <li>• school jobs &amp; classroom jobs</li> <li>• regular class placement for as many periods as possible</li> <li>• community skills: general &amp; specific to parent requests</li> <li>• all school activities such as lunch, recess, assembly, friendship</li> <li>• fine motor control of arm and hand involvement</li> <li>• tactile discrimination and orientation skills</li> </ul>

Name: Holly

Date: February 16, 1991

Grade: 2nd

Persons present: 2nd grade teacher, special education teacher, parent, VH specialist

**TENTATIVE CONTEXTS AND OBJECTIVES**  
(A Plan of Action)

LIST CONTEXTS, PERIODS, AND ACTIVITIES TARGETED FOR INSTRUCTION	Team members responsible	Timelines	Date Complete
<p><b>2nd Grade</b></p> <p>8:45 - 9:05 - morning circle            9:05 - 9:30 - language arts/social studies            9:30 - 10:00 - activity stations/workshop            10:00 - 10:20 - recess            10:20 - 10:45 - math stations/workshop            10:45 - 11:05 - freechoice-math &amp; reading            11:05 - 11:45 - writing games/journals            11:45 - 12:00 - classroom cleanup, jobs            12:00 - 12:45 - lunch/recess            12:45 - 1:30 - science/social studies workshop            1:30 - 2:00 - groupwork teams cleanup            2:00 - 2:15 - closing circle</p>			
<p><b>LIST PRIORITY CURRICULAR CONTENT AND BASIC SKILLS. Indicate any special assessment needs</b></p>			
<ul style="list-style-type: none"> <li>• communication assessment</li> <li>• use of non-symbolic communicative means; use of call device, etc.</li> <li>• social interaction skills</li> <li>• wheelchair/seating and positioning evaluation</li> <li>• tactile-motor skills</li> <li>• tactile discriminations</li> <li>• eating and drinking skills</li> <li>• interaction "extenders"</li> <li>• leisure skills</li> </ul>			
<p><b>SPECIFY ANY SPECIALIZED HEALTH CARE NEEDS (Attach reports, etc.). SPECIFY ANY TECHNOLOGY OR EQUIPMENT NEEDS.</b></p>			
<ul style="list-style-type: none"> <li>• follow food and liquid intake</li> <li>• dehydration occurs easily</li> </ul>			



Name Holly Date: February 23, 1991  
 Grade 2nd Team members contributing: Sp Ed. Teacher, O.T., Project staff, para, reg. ed. 1st. grade teacher

TEAM ASSESSMENT RECOMMENDATIONS

Time/Context Activity	This context is especially useful for teaching/practicing the following skills:	Adaptations needed	Additional assessment is needed on:	The following changes in the activity or lesson design would be useful:	An alternative might be:	Additional integration interventions
10:20-math stations 10:45-free choice math & reading games	<ul style="list-style-type: none"> <li>grasping</li> <li>hold materials</li> <li>activate score card during math games</li> <li>exchange materials-push toward person when touched</li> <li>use of communication call device</li> <li>orient to peer interactions</li> </ul>	<ul style="list-style-type: none"> <li>switch to use for math games</li> <li>scorecard</li> <li>adaptive handles</li> <li>call device</li> <li>group uses H. as score keeper</li> <li>partner for getting set up</li> </ul>	<ul style="list-style-type: none"> <li>switch access</li> <li>tactile discrimination</li> </ul>	<ul style="list-style-type: none"> <li>consistent grouping for Holly during stations</li> <li>consistent rotation of peers through math games</li> </ul>		<ul style="list-style-type: none"> <li>work with group on H's participation</li> <li>assist peers in responding to Holly's call device and nonsymbolic communication</li> </ul>
11:05-journal writing	<ul style="list-style-type: none"> <li>Social and communication skills</li> </ul>	<ul style="list-style-type: none"> <li>an adapted "journal"</li> </ul>	<ul style="list-style-type: none"> <li>"Conversation extenders" to use with journals for Holly</li> </ul>		<ul style="list-style-type: none"> <li>Milk delivery job with classmates</li> </ul>	

Worksheet #3

<p>11:05- Alternate: milk delivery job with ND peers from the class</p>	<ul style="list-style-type: none"> <li>• orient toward persons interacting with her</li> <li>• motion: to pull mild toward self with R. arm/hand motions</li> <li>• push milks away from self when cued by peer</li> <li>• maintain arm/hand contact with cart (allow physical cues)</li> </ul>	<ul style="list-style-type: none"> <li>• tactile "count" for milk (who will do each day?)</li> <li>• milk carton for intro to activity</li> <li>• "end" of activity: need standard gesture</li> </ul>	<ul style="list-style-type: none"> <li>• extending the interactions</li> <li>• other games to play</li> </ul>	<ul style="list-style-type: none"> <li>• Students give H. the milk to bring in and give her the cues</li> <li>• Students take 2 milks at a time- continue</li> </ul>	<ul style="list-style-type: none"> <li>• instruct peers to give cues for H. to grasp milks</li> <li>• instruct janitor, reg. ed. teachers and peers to greet H. with their own "sign"</li> <li>• allow time</li> <li>• rotate ND peers through as partners - 2 days at a time</li> </ul>
<p>12:00 lunch time recess</p>	<ul style="list-style-type: none"> <li>• swallowing &amp; lip closure</li> <li>• drinking at least 2 oz from cup</li> <li>• eating semi solid foods</li> <li>• selecting game by extended touch</li> <li>• orienting to peers</li> <li>• use communication call device</li> </ul>	<ul style="list-style-type: none"> <li>• adaptive eating materials</li> <li>• jump rope adaptations</li> <li>• call device</li> </ul>	<ul style="list-style-type: none"> <li>• H. should be seated with her most familiar group from class</li> <li>• allow ND peers to "arrange" the seating</li> </ul>	<ul style="list-style-type: none"> <li>• Peers to sit with</li> <li>• work on group games for recess</li> <li>• responses to call device</li> </ul>	



Name: Holly  
 Grade: 2nd

Date: \_\_\_\_\_  
 Day(s) of the week: M-F, see other  
 schedule for daily "extra" periods  
 (i.e. art, PE, library, etc.)

**Individual Participation and Instructional Schedule Matrix**

(Indicate whether specific/planned instruction (P), incidental instruction (I), or variable (V).)

Instructional Goals and Objectives	Student's Schedule of Activities, Contexts									
	8:45-9:05 Morning Circle	9:05-9:30 Language Arts/Social Studies	9:30-10:00 Activity Stations	10:00-10:30 Recess	10:20-11:05 Math station/ Workshop/ Free choice Math and Reading	11:05-11:45 Milk Delivery Job	11:45-12:00, 12:00-12:45 Cleanup, lunch and recess	12:45-1:30 Science and Social Studies Workshop	1:30-2:15 Group work, teams cleanup, closing circle	
• Grasping	I	P,I	P,I	I	P	P	P	I,V	V	
• Social interaction skills	P,I	I	P,I	P,I	I	P,I	I	I	I	
• Communication skills	P,I	I	I	P,I	I	P,I	I	I	I	
• Use of adapted switches for games, etc.		P	P		P					
• Holding on to items	I	P	I		I	P	P	P	I	
• Pushing items away and pulling toward self	I	P	I		I	P	P	P	I	
• Discriminating people	P	I	I	I	P	P		P	I	
• Discriminating routines	P	P	P	P	P	P	P	P	P	
• Eating				P			P			
• Drinking				P			P			
• Playskills			P	P	P		P			
• Reaching	I		P	I	P	P		I	I	

