

FOCUS ON EXCEPTIONAL CHILDREN

Strategies for Educating Learners with Severe Disabilities Within Their Local Home Schools and Communities

Jacqueline S. Thousand and Richard A. Villa

In a number of schools in North America, we now can walk into elementary and secondary classrooms and observe students who could be labeled severely or multiply handicapped receiving their education together with similar-aged classmates who have no identified special education needs (Biklen, 1988; Blackman & Peterson, 1989; Brown et al., 1989; Forest, 1988; Nevin, Thousand, Paolucci-Whitcomb, & Villa, 1990; Porter, 1988; Schattman, 1988; Villa & Thousand, 1988; York & Vandercook, 1989). Inclusionary educational practices for learners with intensive educational needs have evolved over the last decade in Vermont. A number of administrative, organizational, instructional, and teacher preparation strategies support the education of intensively challenged or challenging learners in general education environments, and we call for national policy changes to support inclusive schooling for all students.

WHO ARE LEARNERS WITH SEVERE HANDICAPS?

Whether a student is considered as having severe handicaps often depends upon the idiosyncratic definition adopted by the state and community in which the student resides. A U.S. federal definition identifies students with severe handicaps as those who:

- 1) may possess severe language and/or perceptual-cognitive deprivations, and evidence abnormal behaviors such as: i) failure to respond to pronounced social stimuli, ii) self-mutilation, iii) self-stimulation, iv) manifestation of intense and prolonged temper tantrums, and v) the absence of rudimentary forms of verbal control, and 2) may also have extremely fragile physiological conditions. (20 U.S.C. 1401(7); Former 45 CFR 121.1)

Brown et al. (1983, p. 77) offered an alternative definition of "severely handicapped" students as school-aged students who function intellectually within the lowest 1% of their particular age groups. This 1% includes learners who may have labels such as physically handicapped; multiply handicapped; dual sensory impaired (i.e., deaf-blind); autistic or psychotic; trainably mentally retarded; or moderately, severely, or profoundly retarded.

Jacqueline Thousand is an assistant professor at the Center for Developmental Disabilities of the University of Vermont, Burlington. Richard Villa is Director of Instructional Services and Staff Development for the Winooski (Vermont) School District.

At the local school level, formal definitions such as the two just presented have little functional meaning or use. What is considered a "severe handicap" varies from one school to the next and is contingent upon each school community's beliefs about and experience with students whose educational needs go beyond the school's standard curriculum or instructional practices. For example, a school community with little experience accommodating for individual students may think of a new student with Down syndrome as "severely handicapped." A second school, with extensive experience educating students who have a broad range of needs, may view much more challenged student as "just another student" with unique needs that must be met. Given this phenomenon of "relativity," terms such as *students with intensive educational needs*, *students who present intensive challenges to school personnel*, and *challenged or challenging students* are used here to represent students with "severe handicapping" characteristics described in the previous paragraph, as well as other students who, for whatever reason,

are perceived by school personnel as "most challenging" to the current school culture or ecosystem.

WHO BELONGS IN GENERAL EDUCATION CLASSROOMS?

Currently there is an emerging recognition of the benefits of educating students with intensive educational needs in their local communities and schools (Brown et al., 1989; Sailor, 1989). There is, however, disagreement within the field as to whether students with intensive educational needs belong in general education classrooms; "the major placement issue of the day is whether students with severe intellectual disabilities should be based in regular or special education classrooms in home schools" (Brown et al., p. 12).

Writing for school principals, Burrello and Tourgee (1990) sorted out "students with severe disabilities" as the sub-population of students with handicaps for whom "maintaining a self-contained setting in a centrally located place in the building with socialization opportunities was the most realistic program" (p. 3). Jenkins, Pious, and Jewell (1990) determined that, although the regular education initiative (Will, 1986) should apply to most students with handicaps, students with intensive educational needs should be excluded, because their needs extend beyond the normal developmental curriculum that the classroom teacher is responsible for delivering and adapting for individual learners.

FOCUS ON EXCEPTIONAL children.

ISSN 0015-511X

FOCUS ON EXCEPTIONAL CHILDREN (USPS 203-360) is published monthly except June, July, and August as a service to teachers, special educators, curriculum specialists, administrators, and those concerned with the special education of exceptional children. This publication is annotated and indexed by the ERIC Clearinghouse on Handicapped and Gifted Children for publication in the monthly *Current Index to Journals in Education (CIJE)* and the quarterly index, *Exceptional Children Education Resources (ECER)*. It is also available in microfilm from Xerox University Microfilms, Ann Arbor, MI. Subscription rates: Individual, \$27 per year; institutions, \$36 per year. Copyright © 1990, Love Publishing Company. All rights reserved. Reproduction in whole or part without written permission is prohibited. Printed in the United States of America. Second class postage is paid at Denver, Colorado. **POSTMASTER: Send address changes to:**

Love Publishing Company
Executive and Editorial Office
1777 South Bellaire Street
Denver, Colorado 80222
Telephone (303) 757-2579

Edward L. Meyen
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Glenn A. Vergason
Georgia State University

Richard J. Whelan
University of Kansas Medical Center

Stanley F. Love
Publisher

Carolyn Acheson
Senior Editor

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION

Date of filing: October 15, 1990
Title of Publication: FOCUS ON EXCEPTIONAL CHILDREN
Frequency of Issue: Monthly except June, July, and August
Location of Known Office of Publication: 1777 S. Bellaire St., Denver, CO 80222
Location of Headquarters of Publisher: 1777 S. Bellaire St., Denver, CO 80222
Name and Address of Publisher, Editor, and Managing Editor: Stanley F. Love,
1777 S. Bellaire St., Denver, CO 80222
Owner: Stanley F. Love
Extent and Nature of Circulation:

	Average No. Copies Each Issue During Preceding 12 Months	Single Issue Nearest Filing Date
Total No. Copies Printed	3917	3113
Paid Circulation		
Sales through Dealers, etc.	0	0
Mail Subscriptions	2917	2459
Total Paid Circulation	2917	2459
Free Distribution	375	380
Total Distribution	3292	2839
Office Use and Left Over	625	274
Total	3917	3113

I certify that the statements made by me above are correct and complete.

(Signed) Stanley F. Love, Publisher

Others have devoted entire texts to describing strategies for including *all* students, regardless of perceived exceptionalities, within general education and community environments (Lipsky & Gartner, 1989; S. Stainback, & W. Stainback, in press; S. Stainback, W. Stainback & Forest, 1989; W. Stainback & S. Stainback, 1990a). Williams, Villa, Thousand, and Fox (1990) go so far as to suggest that the special versus regular class placement issue really is a non-issue for a number of reasons. The successful placement and education of students with intensive educational challenges in regular classes has been occurring for a number of years in schools throughout North America (Thousand et al., 1986). Furthermore, Public Law 94-142, the Education for All Handicapped Children Act, clearly specifies that placement of any student must be based upon the student's identified needs, not the student's handicapping condition or categorical label.

To even raise the question of whether regular class placement is appropriate for a category of learners (i.e., students with intensive educational needs) "assumes that placement can be made based upon handicapping condition without documentation of an individual student's needs and examination of whether the needs could be met in a regular class-based placement" (Williams et al., 1990, p. 333). Finally, learning and social benefits for students with and without identified handicaps have been documented (S. Stainback & W. Stainback, 1990a; Thousand & Villa, 1989), as have benefits for teachers, when educators collaborate to invent individualized, responsive educational programs (Nevin et al., 1990; Thousand et al., 1986; Thousand & Villa, 1990; Villa & Thousand, in press).

The special/regular class placement question may be a non-issue. Yet, the norm within most North American schools is still for intensively challenged students to be educated in schools or classrooms other than those of their neighbors' children. Why? First, systems change takes time. Second, people thinking about change are more likely to "take the plunge" if they have models to observe, visit, and imitate. These are now available, and teachers, parents, students, and school board members can now share their stories about how to create schools in which students with intensive needs are welcome and successful.

A CASE STUDY IN VERMONT

Background and a Demonstration of Success

Vermont is a small, sparsely populated state, notorious for its strong small-town community spirit and interest in local community control in decision making. It is one of the few

places where the populace of each small town turns out for a day-long annual town meeting to debate and decide upon issues large and small. Vermont is also a state with a long history of educating students who have mild handicaps in their local school general education classroom, with resource room and consulting teacher support to the classroom teacher (Christie, McKenzie, & Burdett, 1972; Idol, Paolucci-Whitcomb, & Nevin, 1986; Knight, Meyers, Paolucci-Whitcomb, Hasazi, & Nevin, 1981, McKenzie, 1972; McKenzie et al., 1970).

In the latter half of the 1970s, special classes for students with intensive education needs were established in public schools. Up to this time most of these children were not in public school and had not been offered educational services at home or in the institution in which they resided. To provide training and technical assistance to special class teachers in the new role of educating these "most challenging" students, an interdisciplinary support team—the I-Team—was jointly created with state and federal funding by the Vermont Department of Education and the University of Vermont (McKenzie, Hill, Sousie, York, & Baker, 1977). As members of this team traveled throughout Vermont, providing training and technical assistance, they noticed that some schools chose not to send their intensively challenged students to the newly formed special classes but instead chose to educate them along with their agemates in their local schools. This observation led to development of a pilot project demonstrating the successful transition of two students with intensive needs back to their home schools from a regional special class program.

The Homecoming Model Project

Encouraged by these results, funding was sought and secured from the federal Office of Special Education Programs to expand the effort with 26 schools in four school districts (Williams et al., 1986). The project's objectives were to develop, field-test, and evaluate a "model to bring 'home' students [with intensive challenges] from regional special education programs and prevent other students from ever being placed in them" (Thousand et al., 1986, p. 6). The project, known as *Homecoming*, achieved its objectives by its end, in the fall of 1986.

A total of 77 students, ranging in age from 5 to 17 years, benefited from the *Homecoming* model. Of these students, 58 have been transitioned from regional special educational programs to regular classrooms in their local schools. An additional 19 students who were at risk of being placed in self-contained special classes or out-of-district programs continue to be maintained within regular education environments of their local schools. (Thousand et al., 1986 p. 6)

Of the original 58 students who transitioned to their home schools in the mid-1980s, all avoided re-referral to out-of-school placements. And, four years following the project's end, hundreds of additional Vermont students with various handicapping conditions have been returned from former regional and special class programs to dozens more local schools (O'Connor, 1990).

What has all this change taught us? What are the critical elements for a school district to successfully transition and maintain challenging students in local educational settings? An important outcome of the Homecoming project was the identification of conditions considered essential for intensively challenged students to be transitioned to and maintained within home school classrooms. Six critical ingredients, described in detail in *The Homecoming Model* (Thousand et al., 1986), are briefly presented in Table 1.

Best Educational Practices for Educating Intensively Challenged Students

Along with the introduction of an increasing number of students with intensive educational needs into general education settings of Vermont schools was a pressing need to provide instructional staff with guidelines for delivering special education and related services to optimize student participation in integrated school and community settings. With Vermont Department of Education leadership and University of Vermont support, guidelines representing current *best educational practices* were generated, resulting in a document of 55 quality indicators in the nine best practice areas described in Table 2. These statements of best practice were validated by general and special education educators, administrators, and parents (Williams, Fox, Thousand, & Fox, 1990) and adopted by the Vermont Department of Education as guidelines for local education agencies. In 1987 they were made widely available for use by school personnel, parents, school board members, and community members.

Best Practices for Meeting the Needs of All Students

As educational personnel became more experienced and skilled in integrating intensively challenged students into the routine and culture of their local schools, additional exemplary educational practices (e.g., team teaching, cooperative group learning models, peer tutoring programs, peer support networks) and "critical ingredients" (e.g., expansion of the curriculum to include social skills development and community service, a new instructional role of employment special-

TABLE 1
Critical Elements for Transitioning and Educating Students in Their Home School

Elements	Indicators
1. Administrative commitment	The superintendent of schools, the special education administrator, and the building principals demonstrate, through their actions, support for the concept of educating all students within regular education environments in local schools. District administrators initiate review of current policies and procedures to determine barriers to age-appropriate regular class placement of all learners and make needed modification.
2. Instructional staff commitment	Despite varying levels of commitment, instructional staff are expected to demonstrate behaviors that support implementation of a model to serve all students in regular education environments. A variety of strategies are employed to develop staff commitment.
3. A means for accessing expertise	A collaborative relationship is established for expertise to be shared through the development of local planning teams, which include members of the school and greater community.
4. A process allowing for cooperation	Staff members receive training in collaborative teaming processes and skills so that members of local planning teams may effectively share expertise and accomplish team objectives.
5. A process for developing transition and maintenance plans	A structured (15-step) planning process designed for the transition and maintenance of students within regular education environments is used by local planning teams.
6. Access to consultative support	Members of local planning teams have access to professional(s) who have background and experience in developing integrated educational programs for intensively challenging students. The professional(s) provide consultation, training, and technical assistance.

ist to expand vocational education to include job development and training) emerged, which benefited many students. With the practice of more and more generic inclusionary educational strategies, the original best practices clearly were too "special education" in nature and in the language (see Table 2). They communicated an inappropriate and unwanted message that educational practices effective for students with intensive educational needs were very different from the practices effective for the rest of the school population.

This led to revision of the best practice categories and

TABLE 2
Best Practices Areas

1. *Age-appropriate placement in local public schools*
The placement of choice for all students (with and without handicaps) should be within chronologically age-appropriate regular classrooms in the students' local public schools.
2. *Integrated delivery of services*
IEP's and instructional programs should indicate the integration of instruction on education and related service goals into everyday school, home, and community activities. Related service providers should offer consultation and assistance to special and regular educators, parents, and others in developing, implementing, and integrating instruction on related service goals.
3. *Social integration*
Students with handicaps should have access to the same environments as nonhandicapped peers of similar chronological age. Primary goals of social integration should be to increase the number of integrated community and school environments and to improve the quality of interactions in those environments.
4. *Transition planning*
Transition planning should occur well in advance of major moves (e.g., early education, special education to elementary school, elementary to high school, high school to adult services). Transition objectives should be included in IEPs and reflect the input of significant parties affected by the transition.
5. *Community-based training*
Students should have the opportunity to acquire and demonstrate specific skills within appropriate community settings. Conditions and criteria of IEP goals and objectives should include performance in natural environments.
6. *Curricular expectations*
Curricula or curriculum guidelines should progress from no skills to adult functioning in all areas of integrated community life, with a system for longitudinal monitoring of student progress.
7. *Systematic data-based instruction*
There should be written schedules of daily activities, clearly defined objectives, reliably implemented instructional programs, and systematic data collection and analysis. Instructional decisions should be based upon documentation of student's progress.
8. *Home-school partnership*
Parents should have ongoing opportunities to participate in the development of their child's IEP and the delivery of educational and related services. There should be a clearly delineated system for regularly communicating with parents and providing parents with information. Parental concerns should be reflected in IEP goals and objectives.
9. *Systematic program evaluation*
Educational and related services should be evaluated on a regular basis. Evaluations should actively involve the entire program staff and provide administrators and staff with information regarding the achievement of program goals; student progress; discrepancies requiring remediation; directions for future program change; and program impact upon students, their families, and the community.

indicators to reflect exemplary practices from both general and special education. As the items in Table 3 illustrate, the new best practice document is intended for use with *all* school-aged students (Fox & Williams, 1990). The categorical labels and the language used to define the items in Table 3 versus the original best practice items reveal a shift toward the conceptualization of best educational practices as supporting a single system of education responsive to all children versus a dual system of general and special education (W. Stainback & S. Stainback, 1984; Wang, Reynolds, & Walberg, 1988).

State-Level Support for Inclusionary Educational Practices

The shift of educational services for more challenging students from regionalized self-contained special classes to local schools, coupled with a dramatic rise in special education costs and the national interest in restructuring schools, created a need to examine the state's system for funding special education and to establish state board of education and department of education policies to support services in local school generated education classrooms. The "old" funding formula for special education services was founded upon the notion of "placement" rather than "services needed." It provided fiscal incentives for serving children in more restrictive environments; the more restrictive the placement (e.g., residential, special class), the greater the state's share of funding for that placement.

A 3-year collaborative and consensus-building effort among the Vermont State Board of Education, the Vermont State Department of Education, key state legislators, and the Vermont Education Coalition (representing the Vermont Headmasters Association, the Vermont Superintendents Association, the Vermont-National Educational Association, the Vermont Parent Teacher Organization, and the Vermont Coalition for Disability Rights) resulted in new educational goals, new legislation, and a new funding mechanism. The new education goals articulate the need to restructure schools to support very high performance for all students. They forward the vision that "there is no special education as we used to know it. Children are different from one another in lots of ways, and the schools [must] accommodate everyone with an inventive array of special services" (Vermont Department of Education, 1990, p. 2).

Legislation in 1988 defined the state's share of special education costs at 50% and created a mechanism to fund educational services for students regardless of the place in which they were delivered. A 1990 modification of this legislation declared the following.

TABLE 3
Selected Best Practices
From Regular and Special Education
Sample Indicators

School Climate and Structure

Indicator #1

The school's philosophy statement and objectives should be developed by administrators, staff, students, parents, and community members and should reflect the school's commitment to meeting the individual needs of all students in age-appropriate integrated school and community settings.

Indicator #7

The school's instructional support system (e.g., classroom-based model for delivering support services, teacher assistance team, individual student planning teams, special education prereferral process, volunteer system) should be developed by administrators, staff, students, parents, and community members and should be available to all students and staff.

Collaborative Planning

Indicator #9

The school should provide time during school hours for instructional support teams (e.g., individual student planning teams, teacher assistance teams, teaching teams) to meet and for individual team members to monitor services, and to provide timely consultation, support, and technical assistance to families and staff.

Social Responsibility

Indicator #13

The school should provide opportunities for students to develop a sense of responsibility and self-reliance through age-appropriate activities such as peer tutoring/mentoring, student government, participation in decision making about important school issues, and school and community jobs.

Curriculum Planning

Indicator #18

The school's curricula should be developed by administrators, staff, students, parents, and community members, and should identify age-appropriate content (e.g., reading, math, history, social/emotional, arts, health) and process-oriented (problem-solving and collaboration skills, study skills) goals and objectives that set a high standard of excellence and address the needs of all students.

Indicator #24

The system for monitoring the progress of students with intensive needs in basic skill and/or social areas should include: (a) indications of level of independence on identified skills/activities; (b) indications of environments in which those skills/activities have been demonstrated; (c) an annual summary; and (d) post-school follow-

ups of employment, self-esteem, and socialization for purposes of program improvement.

Delivery of Instructional Support Services

Indicator #25

Instructional support services and staff (e.g., Chapter I, special education, speech and language, guidance, peer tutoring) should be incorporated into ongoing school and community activities.

Individualized Instruction

Indicator #30

The school should provide opportunities for all staff to become proficient in using a variety of instructional methods (e.g., cooperative learning, whole language, peer tutoring, drill and practice, incidental teaching, computer-assisted instruction), matching methods to individual student needs, and incorporating methods into ongoing activities.

Indicator #32

A variety of instructors (e.g., teachers, teacher assistants, same-age peer tutors, cross-age peer tutors, peer mentors, volunteers) should be available to students and matched to individual student needs.

Transition Planning

Indicator #41

There should be procedures for facilitating the smooth transition of all students from one educational setting to another, and from school to post-school life.

Family-School Collaboration

Indicator #44

The school should provide families with frequent opportunities to visit the school and to regularly communicate with school staff on topics important to both the family and the school.

Planning for Continued Best Practice Improvement

Indicator #49

A plan for improving best practice-based services within the school should be developed every three to five years by a school planning team consisting of administrators, staff, students, parents, and community members.

Note: Indicators were selected from a total of 58 indicators included in a July 3, 1990 draft of *Selected Best Practices From Regular and Special Education* (Fox & Williams, 1990).

It is the policy of the state that each local school district design and implement, in consultation with parents, a comprehensive system of education services that will result, to the maximum extent possible, in all students succeeding in the regular classroom. (Vermont Act 230, 1990, p.1)

This legislation also dedicates 1% of the total state special education budget to training teachers and administrators in strategies for providing in-class supports to students and requires each public school to establish a preferential system—an "instructional support team"—to problem solve regarding any child who might need additional classroom support.

Change at the "micro" level (i.e., demonstrations of educating intensively challenged students in general education classrooms) and change at the "macro" level (e.g., promulgation of a funding formula and training dollars to support inclusive schooling) are always inextricably intertwined, continually interacting to alter the beliefs and practices of the time. Collaboration and advocacy on the part of parents, educators, and policy makers can result, and have resulted, in dramatic changes in the educational scene, as the Vermont history illustrates.

WHAT SCHOOL LEADERSHIP CAN DO

The formal leadership personnel of a school district are the ones charged with publicly representing the district's vision or mission and coordinating the actions of school personnel and students to be consistent with this vision. The educational leadership, then, is in the position of shaping the organizational structure of the schools within the district and the beliefs of the school community. These structures and beliefs can work to support or to inhibit a school's capacity to support the education of intensively challenged students in general education settings. The recommendations offered in this section are derived from research findings, model demonstration outcomes, and surveys of teachers and general and special education administrators in Vermont who are concerned with educating *all* students in heterogeneous local school and community environments (Villa & Thousand, 1990).

Promoting an Inclusive Vision

Administrators involved in including intensively challenged students in their local schools stress the importance of clarifying for themselves, school staff, and the community a vision based upon at least the following assumptions: (a) all children are capable of learning; (b) all children deserve the opportunity to receive educational services with similar-aged

peers in heterogeneous local school classrooms; and (c) the school district is charged with meeting the unique educational and psychological needs of all of its community's children. To articulate such an inclusive vision is necessary but not sufficient for school staff to adopt the desired school mission. Efforts have to be taken to foster understanding and consensus regarding the vision.

One strategy for building consensus is through education of the school staff. Smith (in press) has noted that how teachers interact with students depends, at least in part, upon the conceptual framework and the language they use to think and talk about students. Therefore, the district leadership must (a) develop and deliver a comprehensive inservice training agenda exposing the school community to information regarding the theoretical, ethical, and data-based rationale for inclusionary education, and (b) offer them opportunities to acquire a common knowledge base, language, and set of technical skills for communicating about and implementing exemplary educational practices.

A second powerful strategy for securing support for an inclusive vision is to involve representatives of school and community stakeholder groups in formulating the school district's mission and objectives for supporting students with intensive educational needs in regular education. People who participate as decisionmakers more likely develop a sense of ownership for their decisions and act to promote agreed-upon outcomes than if decisions are imposed upon them (Thousand et al., 1986; Thousand, Nevin, & Fox, 1987; Thousand, Villa, Paolucci-Whitcomb, & Nevin, in press).

Schools that are successful in realizing a vision (e.g., the education of all intensively challenged students in integrated environments) are ones that attend to the development of a spirit of enthusiasm and devotion to the common goal by creating rewards and incentives and publicly recognizing staff and students who model or actively promote the district mission of inclusion. In structuring rewards, administrators are advised to reward *groups* as well as individuals, as this highlights the district's valuing of collaborative team efforts. Staff and students should be asked what *they* consider rewarding. Any person holding any job (e.g., bus driver, secretary, cafeteria worker, community volunteer) within the school district can forward or thwart the inclusionary mission.

All members of the school community, then, need to be viewed as candidates for acknowledgement. Short notes of praise, posting of "thank you" notes from visitors, retreats for collaborative planning efforts, opportunities for conference attendance or presentations are just a few examples of recognition methods that administrators have successfully structured.

Strategies for building understanding and consensus will always be unique to the history, characteristics, and values of

each school community. Although system-wide support for an educational mission is the ideal, not *all* members of the school community will or need to believe in that vision in order for the formal leadership to take actions to increase the district's capacity to provide quality support to intensively challenged students and quality instructional services to all students in heterogeneous learning environments.

Expanding the Curriculum

Those who have worked in both the historically separate general and special education systems know that the curriculum and effective instructional strategies employed in the two systems are fundamentally the same. Students eligible for special services are simply at a different place in the curricular sequence than their agemates. For students with intensive educational needs, the curriculum, with its focus upon work, social life, and recreation skills and use of the community as a learning environment, may seem to be notably different. A closer look, however reveals that the general education curriculum clearly addresses vocational instruction, social skills (e.g., cocurricular activities and clubs, speaking and listening competencies), life skills (e.g., technology education, family living), and recreation needs (e.g., physical education, music, art). Furthermore, general education has always employed the community as an instructional setting (e.g., field trips, vocational placements, behind-the-wheel driving).

District leadership has to lead the school community in discovering the sameness of the curriculum for learners with and without intensive challenges and to work with them to reorganize content, instructional staff, and instructional settings so that a generic set of services may be made available to any student. The content of all courses has to be examined closely. Duplicate content should be eliminated (e.g., a special education basic skills class in math addresses much of the same content as the general education consumer math class), and responsibility for teaching common content has to be distributed across the instructional staff members who formerly worked exclusively in general or special education.

New curricular domains, such as social competence and responsibility, may have to be developed; and new job roles (e.g., integration or support facilitator, school-based employment specialist) may have to be developed to deliver the expanded curriculum in integrated school and community settings (W. Stainback & S. Stainback, 1990b). Community training sites should be examined for potential use by a broader range of students. An IBM plant may offer an intensively challenged student an assembly line job experience, an advanced computer science student programming experience,

and the opportunity to acquire the social behaviors expected in a workplace.

Developing Partnerships for Change

More often than not, no one school district possesses all of the diverse human and material resources it may need to successfully initiate a change process (i.e., attempting the inclusion of intensively challenged and challenging students in a school system for the first time). The development of professional partnership relationships with State Department of Education personnel, faculty of institutions of higher education, consultants, and other school districts with similar interest in creating more responsive schools in a recommended administrative practice for gaining access to much needed human and fiscal resources.

State Department of Education personnel may be able to provide fiscal incentives or regulatory relief so that innovative model demonstration projects may be initiated. They also may provide valuable support in the public relations area—articulating in publications, circulars, and public presentations the need for school restructuring and the value of creating schools that welcome and exemplify excellence for all children.

People with specific expertise not yet available within the district (e.g., nonverbal communication specialists, experts in approaches for establishing constructive and positive school conduct, teachers with experience adapting curriculum for intensively challenged students, experts in cooperative group learning models) may be hired to provide needed technical assistance and training. Staff, students, parents, and administrators from school districts with experience in educating students with intensive educational needs in general education can provide training and should be tapped as trainers regarding the "how to's" of inclusion. They also are likely to have valuable insights to help forward the change process, insights based upon their own real life experiences with being in the middle of change.

School districts attempting to accommodate students with intensive challenges are advised to collaborate with institutions of higher education for the mutual benefit of both organizations: Together the two organizations might design and solicit state or federal support for model demonstration projects in the school district, arrange for valuable internship opportunities for graduate students in integrated educational settings, conduct research to document the impact (e.g., student achievement, social development, post-graduation employment, teacher competence and morale) of inclusive educational practices and local placement of all students, co-design and deliver a district's inservice training program, or

co-develop and deliver preservice teacher preparation course content for new or emerging roles (e.g., integration or support facilitator) necessary for supporting a more diverse group of students, their teachers, and their families.

Finally, school districts that share a common vision of inclusive education should form partnerships with one another and exchange personnel (e.g., reciprocal inservice presenters) and resources, jointly problem solve the barriers to change, form a coalition to advocate for changes in teacher preparation programs and state-level policy or funding, and celebrate the positive outcomes of structuring heterogeneous learning opportunities for children.

Restructuring to Create a Climate of Equality and Equity

We cannot ask students to do what we, as adults and educators, are not willing to do ourselves. More specifically, we cannot expect children to support and respect one another in heterogeneous educational groupings if we are not willing to also create heterogeneous collaborative planning and teaching teams, actively involve families in decision making regarding their children's educational programs, and empower students to join in as instructors, advocates for themselves and others, and decision makers regarding school-wide issues.

Redefining the Role of the Teacher and the Expert As Members of a Collaborative Team

Schools attempting to educate a diverse group of students have taken various steps to merge the instructional resources of general and special education to meet the needs of a heterogeneous student body. Some schools have dropped professional labels and distributed job functions across a number of school personnel (Villa & Thousand, 1988). The Winooski (Vermont) School District has created a single job description for all professional educators (classroom teachers, consulting teachers, speech and language pathologists, guidance personnel), which emphasizes collaboration and shared responsibility for educating all of the community's children.

Some schools have formed long-term team teaching arrangements among faculty (e.g., Bauwens, Hourcade, & Friend, 1989). Thousand and Villa (1990) describe the *teaching team*—"an organizational and instructional arrangement of two or more members of the school and greater community who distribute among themselves planning, instructional, and evaluation responsibilities for the same students on a regular basis for an extended period of time" (p. 152). By looking to the entire adult and student community as potential team members, teaching teams result in better instruct-

or/learner ratios and ongoing exchange of knowledge and skill among team members—outcomes that benefit more students than just those requiring intensive support.

Personnel in schools that have been most successful in responding to the needs of intensively challenging students consistently identify as the cornerstone to their success a strong *collaborative team*, which engages in problem-solving and decision-making processes referred to as "collaborative teaming" (Thousand et al., 1986). Any adult or student interested in supporting the education of an intensively challenged student is a potential member of the student's team. In collaborative planning and teaching teams, members agree to coordinate their work to achieve common, publicly agreed-upon goals. Collaborative processes employed by the team are based upon the principles of cooperative group learning (Johnson & Johnson, 1987a), which prescribe five elements for effective team functioning (Thousand & Villa, 1990):

1. Face-to-face team interaction on a frequent basis.
2. An "all for one, one for all" feeling of positive interdependence.
3. A focus on the development of small-group interpersonal skills in trust building, communication, leadership, creative problem solving, decision making, and conflict management.
4. Regular assessment of the team's functioning and goal setting for improving relationships and task achievement.
5. Methods for holding one another accountable for personal responsibilities and commitments.

Instructional support teams, or teaching assistance teams, have long been available to teachers as a support in problem solving regarding students who present educational or behavioral challenges (Chalfant, Pysh, & Moultrie, 1979). The power of these teams and the individual student support teams that employ collaborative teaming processes lies in their capacity to merge the unique skills of talented adults and students, enfranchise team members through the participatory decision-making process, and distribute leadership authority beyond the administration to the broader school community (Thousand & Villa, 1990).

True collaborative teams also promote a climate of equality and equity in a number of ways. Effective collaborative teams have no single leader; leadership roles are distributed and rotated among all members. Specialists or experts have no extra authority; they are "just another member" of the team. Everyone in the group engages in collaborative consultation, alternately playing the consultant/expert and the consultee/recipient role and modeling learning as well as teaching (Thousand et al., in press).

Family-Focused Education Goal Setting

Families of children with identified handicaps are guaranteed, through PL 94-142, certain rights of participation in the development of their children's education program. Family members of a child with intensive educational needs sometimes find themselves in a struggle with school personnel over what they and their child view as "the good life" and the role of the school in this life, and what professional educators and support personnel (e.g., physical therapist, occupational therapist, speech and language therapist) have been trained to believe are necessary educational goals and experiences for the child (Giangreco, Cloninger, Mueller, Yuan, & Ashworth, in press).

The *C.O.A.C.H.* (Giangreco, Cloninger, & Iverson, 1990) assessment and planning instrument for learners with intensive educational needs has been designed expressly for the purpose of assisting family members and the educators of their child to jointly develop educational objectives and integrated school and community experiences considered relevant to the family. The tool is based upon six assumptions regarding families of children with intensive needs:

1. Families know aspects of their children better than anyone.
2. Families have the greatest vested interest in their children's learning.
3. Families likely are the only adults involved in their child's entire schooling.
4. Families have unique access to information about their children in the home and community.
5. Families can positively influence the quality of community services.
6. Families must live with the outcomes of educational decisions every day of the year.

C.O.A.C.H. is unique in that it puts the family in the position of driving the educational goal-setting process and requires family members and professionals to behave as equal members of a collaborative team. The respect for family members' knowledge and wishes structured into the assessment process is illustrated by Part 1 of the instrument. Included in this section are questions regarding five "quality of life indicators" identified by parents of children with multiple handicaps as parameters of a "good life" (Giangreco, Cloninger, & Iverson, 1990, p. 19). The family's answer to these questions are meant to offer team members a mutual understanding of the child's current status and issues important to the family.

Empowering Students to be Instructors, Advocates, and Decision Makers

The term *collaboration* usually conjures up the image of adults, usually *professional* educators, working together. Schools attempting to educate a diverse student population have expanded the list of potential collaborators to include students and other adults (e.g., parents, support personnel, instructional assistants, community volunteers). Villa and Thousand (1990) offer a rationale for placing students in the collaborative role.

First, given the diverse educational and psychological needs of an increasingly heterogeneous student population, school personnel have to take advantage of any and all available human resources. Students provide a rich pool of expertise, refreshing creativity, and enthusiasm at no cost to the school district.

Second, futurists suggest "a new collaborative role for teachers and students in which students accept an active senior partnership role in the learning enterprise" (Benjamin, 1989, p. 9). Educational reform recommendations also call for more active student participation in their learning and more opportunities for students to develop and use higher-level thinking skills (Boyer, 1983; Costa, 1985; Glasser, 1986; Hunter, 1982). This means involving students in planning, instruction, problem solving, and evaluation activities.

Third, futurists advise schools to offer opportunities for students to practice being contributing and caring members of society and to develop empathy for others (Benjamin, 1989; Falvey, Coots, & Bishop, 1990). By encouraging students to advocate for the educational interests and needs of a fellow student (e.g., a student with intensive educational needs), schools create opportunities such as these.

Fourth, given the current information explosion and the increasingly complex nature of a diverse global society, which will require people to pool their knowledge and skills through collaborative efforts, collaborative skills emerge as a core curriculum area for today's schools.

School personnel, then, have a responsibility to model collaboration by sharing their decision-making power with students, in a climate of mutual respect. Among the collaborative arrangements or strategies recommended for schools attempting to create a heterogeneous learning community that includes students with intensive educational challenges are:

- Students as instructors in partner learning, cooperative group learning and adult-student teaching team arrangements.
- Students as members of collaborative planning teams,

determining accommodations for classmates with intensive challenges.

- Students functioning as an advocate for a peer in transition or individualized education plan (IEP) planning meetings.
- Students supporting a challenged classmate in a "peer buddy" system or a Circle of Friends (Forest & Lusthaus, 1989).
- Students as coaches for their teachers, offering feedback regarding the effectiveness and consistency of their instructional and discipline procedures.
- Students as members of curriculum, inservice, and other school governance committees (e.g., school board).

We contend that collaborative arrangements such as these promote the desired outcomes of a quality integrated schooling experience for intensively challenged students, active participation and problem solving on the part of the student body, equity and parity among students and adults, and a spirit of community within the school (Villa & Thousand, in press).

ADAPTING CURRICULUM AND INSTRUCTION: SELECTED STRATEGIES

Recently reviews have proliferated regarding methods for "individualizing" curriculum and providing "individualized" instruction (e.g., Glatthorn, 1987; Nevin et al., 1990; Villa & Thousand, 1988; Slavin, 1987; W. Stainback & S. Stainback, 1989; Wang, 1989). Several strategies considered appropriate and effective for responding to the individual needs of intensively challenged or challenging students are discussed in this section.

Data-Based Strategies For Adapting Curriculum and Instruction

In Glatthorn's (1987) summary of research on methods for adapting curriculum and instruction to respond to individual student differences, three specific sets of approaches were offered as having the strong support of quality research: mastery learning, computer-assisted instruction, and cooperative group learning.

Mastery Learning Models

Common to all of these mastery learning or outcome-based instructional models are the following teacher behaviors (Block & Anderson, 1975; Brookover et al., 1982; Vick-er, 1988):

1. Frequent, brief diagnostic assessment of each student.

2. Individualization of learning objectives with clear pre-set mastery criteria.
3. Frequent specific provision of feedback regarding student performance.
4. Adjustment or supplementation of instruction or practice time, for students who do not meet their mastery criteria.

An underlying assumption of mastery learning models is that all children can learn, given time and the appropriate resources. This assumption, combined with the extensive effectiveness data that make mastery learning models so compelling for use in classrooms, includes intensively challenging students.

Computer-Assisted Instruction (CAI)

As Glatthorn (1987) notes, CAI is particularly useful in three areas of instruction:

1. *Tutorial*, in which new information is presented.
2. *Drill and practice*, in which old information is reviewed for the purpose of remediation or accelerating rate or level of mastery.
3. *Simulations*, in which concept learning or more complex problem solving is the focus.

For students who are physically challenged, nonverbal, or verbally unintelligible to the general public, computers frequently are used as an alternative or augmentive mode of communication as well as a learning tool.

Cooperative Group Learning

As with effective collaborative teams, cooperative learning models (Johnson & Johnson, 1987b; Slavin, 1983) share five common elements:

1. Face-to-face interaction among a heterogeneous group of students.
2. Positive interdependence (structured through common goals or products, joint rewards, division of labor and roles, division of materials or information).
3. Teaching a small-group interpersonal skills.
4. Regular assessment and goal setting regarding the appropriate use of small-group and interpersonal skills.
5. Individual accountability for achieving individualized academic and social objectives.

In Vermont, more than 20 integration facilitators (teachers with the job function of arranging supports for students with intensive educational needs) regularly work with classroom

teachers to structure heterogeneous cooperative group lessons that meaningfully include intensively challenged students. How are lessons adapted to integrate a low-achieving student or a student identified as handicapped? Johnson and Johnson (1987b) describe several proven strategies, but sample lessons designed by classroom teachers with the assistance of an integration facilitator best illustrate how adaptations can be made (Villa & Thousand, in press).

Example #1: A cooperative group lesson adapted for a young student with multiple handicaps. When this lesson occurred, John was 8 years old. He had recently transitioned from a special class for students with multiple handicaps to a combined first/second grade classroom in his local school. John occasionally vocalized loudly but did not yet use vocal behavior to communicate. One of the IEP goals for John was to develop his use of various switches as a first step in developing an augmentative communication system. Other IEP goals were for John to remain with a group throughout an activity, to keep his hands off others' materials, and to refrain from making loud vocalizations in a group.

In this lesson students were assigned to groups of five each. All group members, John included, were expected to sit in a circle, stay with their group, and use an "indoor" voice level. These social and behavioral expectations, by the way, directly addressed two of John's IEP goals.

Groups first were assigned the task of listening to a "talking book" story tape and following along with the illustrations from the story book. Each group had a copy of the story tape, a tape recorder, and the illustrated book. Each child in a group was assigned a specific job or role to perform during the lesson. One job was to turn the pages of the story book to correspond with the tape recording; another was to operate the tape recorder. John was assigned the role of tape recorder operator. His tape recorder was adapted so that he could activate it by pushing on a panel switch.

Being assigned the role of tape recorder operator gave John a valuable and needed role in his group, and it also addressed two of his IEP goals. First, it allowed for assessing the switch's potential for use in a meaningful real-life situation. Second, it inhibited John's grabbing behavior; during the lesson at least one of his hands was engaged in a behavior (pushing the switch to turn on the tape recorder) incompatible with grabbing. Tape recorders also are a popular-leisure time device for children and adults, so are appropriate for John to learn to use.

After listening to the story, groups generated and agreed upon answers to questions concerning the story. They then met as a large group and shared their responses. John's objectives for this part of the lesson continued to be behavioral in nature—to stay with the group and to refrain from

making loud noises or grabbing other's materials.

Example #2: A cooperative group lesson adapted for an adolescent with multiple handicaps. Bob, a young man with multiple handicaps, attended his local junior high school. At the time of the biology lesson presented here, Bob was 13 years old and in seventh-grade classes. For this lesson students were arranged in groups of three or four students to dissect a frog for the purpose of identifying body parts. Bob was assigned to a group of four. Whereas other groups used lab tables to do their dissection work, Bob's group used, as their work space, the lap tray attached to his wheelchair.

Bob's objectives for this lesson were different from those of his classmates. He was engaged in a structured communication program (a two-choice discrimination task between real objects randomly placed on either side of his lap tray), which was simple to deliver and which his peers could, and did, easily implement along with their dissection activities at points throughout the class period.

Another of Bob's objectives was to increase the frequency of his vocalizations. Bob's teammates were instructed to regularly use his name as they worked, which they frequently did. The classroom teacher and her collaborating integration facilitator had instructed Bob's fellow group members regarding the two programs. During the activity no adult was directly involved in guiding the peers' interactions with Bob, although a teacher assistant sat near Bob's group, collecting data for the structured programs.

Partner Learning and Peer Tutoring Systems

Another powerful approach for adapting instruction is partner learning or peer tutoring. As Gartner and Lipsky (1990, p. 84), noted, "evidence of the instructional, social, and cost effectiveness of tutoring is mounting." The many benefits for the tutor and the tutee have been summarized in research reviews and a meta-analysis of research (Cohen, Kulik, & Kulik, 1982; Madden & Slavin, 1987; Pierce, Stahlbrand, & Armstrong, 1984). The documented benefits to students receiving instruction (learning gains, the development of positive social interaction skills with another student, and heightened self-esteem) are typical areas of concern for educators and families of intensively challenged students. As with other instructional and peer support strategies that utilize *peer power* (Villa & Thousand, 1988), "peer-tutoring partnerships are a cost-effective way for teachers to increase the amount of individualized instructional attention available to their students (Armstrong, Stahlbrand, Conlon, & Pierson, 1979)" (Villa & Thousand, 1988, p.146). Good and Brophy (1987) suggest that peers trained as tutors may be more effective than adults. They use more age-appropriate

and meaningful vocabulary and examples; as recent learners of material being taught, they are familiar with the tutee's potential frustrations and problems; and they tend to be more direct than adults.

Same-age and cross-age partner learning systems can be established within a single classroom (Maheady, Sacca, & Harper, 1988), across more than one classroom, or across an entire school. Clearly, formalized school-wide peer tutoring systems cannot and do not arise overnight. The readers are referred to Villa and Thousand (in press) for an example of how a school-wide partner learning system can evolve over a 2- to 3-year period. The following two individual student examples from Villa and Thousand (in press) illustrate the power of partner learning for behaviorally challenging students.

Example #1: Andrew as a second-grade tutor. Serving as a tutor may have a powerfully positive impact on students identified as seriously emotionally disturbed (SED). Consider, for example, Andrew. During his sixth-grade year, Andrew served as a cross-age tutor the last 45 minutes of each school day in a second grade classroom. This privilege was contingent upon daily demonstration of appropriate behavior as outlined in his behavioral contract. Although this young man still presented intensive behavioral challenges to his own teachers and age mates, the second-grade teacher considered him a model of appropriate behavior and a valued instructional asset. His second-grade tutoring time was one or two times during the day when an instructional assistant was *not* assigned to be available in case of disruptions. Andrew demonstrated the importance of his tutoring role the week before the Christmas holiday vacation, when he chose to forego his own class party to present individual gifts to the entire second-grade class and its teacher.

Example #2: Rebecca's role as a tutor. The tutoring role was intended to help Rebecca, a fourth grader identified as SED, to identify and moderate her own antisocial behavior. Following each tutoring session with second-grade students, she was asked to analyze her effectiveness in teaching and managing the students' behavior. Her tutees' behaviors that interfered with teaching and management were highlighted, and analogies were drawn to her own behaviors and their effects upon learning. Strategies then were discussed for effectively moderating her own social behaviors.

Creative Problem Solving by Peers

A number of Vermont teachers who have students with dual sensory impairments (i.e., deaf-blind) use an elegantly simple method for determining meaningful curricular and instructional modifications for intensively challenged stu-

dents as regular class members (Giangreco, 1990). As a routine part of the introduction of a lesson, these teachers ask, "How can we make sure (student's name) is included in this lesson?" or "How can we make (student's name) a meaningful part of this activity?" Teachers report that students are highly creative problem solvers and that they generate a great many realistic modification strategies from which to select.

In a more formal application of creative problem solving, students are taught a five-step problem-solving method (Parnes, 1981, 1988). In a Vermont second-grade classroom, students were guided through the five-step process in order to address the general issue of inclusion for their classmate with dual sensory impairments and multiple disabilities. During the initial 10-minute brainstorming stage of the 45-minute activity, the class generated more than 70 ideas for integrating the classmate into the daily routines of the school. When the ideas were assessed for feasibility in the next step of the process, most ideas were found to be usable. More important, the collaborating integration facilitator reported that in the weeks that followed, initiation directed by peers and staff toward the target student increased in both type and frequency.

Curriculum-Based Assessment

"Curriculum-based assessment" (CBA) refers to a set of criterion-referenced assessment methods for identifying a student's instructional needs by examining the student's ongoing performance within the selected curriculum the school uses with the student. Unlike norm-referenced assessment, CBA is not concerned with comparing students with one another but instead with examining a student's performance in comparison with a preset criterion or standard. CBA gives teachers information about what to teach, closely linking assessment with instruction. Of course, to use CBA, teachers have to identify and select or create a curriculum sequence that is both appropriate and specific enough to give teachers information for designing instructional programs. For in-depth descriptions of CBA methodologies, readers are referred to Deno and Mirkin (1977); Howell and Morehead (1987); Idol, Nevin, and Paolucci-Whitcomb (1986); Shapiro (1987); and Shriner, Ysseldyke, and Christenson (1989).

User-Friendly Measurement Systems

Meyer and Janney (1989) have pointed out that the measurement systems we use in general education settings with intensively challenging students must be "user-friendly"

(p. 265)—capable of documenting desired outcomes and assisting teams to make decisions about instruction while at the same time being unintrusive. A user-friendly measurement system is one “which does not interrupt the flow of instruction or intervention in the classroom, requires minimal time to complete, and allows professionals and paraprofessionals to share both their objective and subjective observations” (p. 265). Meyer and Janney describe a variety of measurement systems that meet these criteria and that teachers in general education settings are more likely to use and find meaningful than trial-by-trial data collection practices, which once were viewed as “good” research methodology or best practice in handicapped-only classrooms.

A Decision-Making Process

Tools are now available to assist teams to creatively design an integrated daily schedule for students with intensive challenges (Giangreco, Cloninger, & Iverson, 1990; Iverson & Cloninger, 1990). One of these is known as the IEP-General Education Matrix. Figure 1 presents a sample completed matrix for a third grader. Notice that the student's team has listed, across the top of the matrix, normally scheduled general class activities, including major transition times (e.g., arrival, departure). (For older students these activities would be replaced with class offerings from the school's master schedule.) Along the left column the team has listed abbreviations for the student's IEP goals, general curriculum areas in which the student has learning outcomes, and any management needs (e.g., regular repositioning, personal care needs such as toileting, administration of medication, hearing aid battery checks).

The matrix offers a visual representation of when and where IEP and other learning goals *might possibly* be met. It is intended to assist a student's planning team in choosing when and where learning goals will be addressed in general education activities.

Options for the Delivery of Support Services

The matrix also may help the team to identify the types of curriculum modifications and instructional supports the student may need for educational objectives to be adequately addressed. Special services and supports may be delivered in general education settings in four broad ways, identified in Table 4 (Giangreco, Cloninger, & Iverson, 1990; Giangreco & Meyer, 1988). When initially exploring potential possibilities for inclusion, the team is advised to consider and decide which of these four options for delivering support is best suited or most likely to occur for each of the activities

included in the matrix. As illustrated in Figure 1, codes may be entered on the matrix to represent the most likely adaptation option for each activity. When coding the matrix, however, these notations do not designate how the student actually is included in classroom activities when the daily schedule is finalized. At this point, the matrix is simply meant to offer a visual representation of how learning and management needs *might* be addressed in general education environments. It also is used to highlight when IEP objectives or management needs do not easily mesh with general education activities.

Problems in Meshing Learning Objectives And General Education Activities

At times it appears that no, or very few, general education opportunities are available to address a learning objective. This meshing challenge shows up on the matrix as an entire row or column of blank spaces. When an entire row is blank, the team must question whether the learning objective for that row is appropriate—whether it is both *functional* (likely to lead to more independent adult functioning or an enhanced social support network) and of *high priority*.

If the answer is “yes” to both of these criteria questions, the team should engage in creative problem solving to avoid the loss of an integration opportunity. Iverson and Cloninger (1990) offer specific strategies and examples for meeting various “match-up” challenges. Peers may be enlisted to help problem solve or to serve as peer tutors or buddies. If other students need alternative instruction, small groups can be arranged within a classroom. In cases where the objective is considered either nonfunctional or of low priority, the team may wish to review the IEP and assess whether the objective should be rewritten so that it is more functional, “put on hold,” or dropped altogether.

Sometimes the IEP-General Education Matrix may reveal one or more general educational activities or classes during which few, if any, learning objectives or management needs seem to fit. These blocks of the school day may be used to focus upon objectives that have to be addressed outside of the classroom (e.g., community-based instruction, job experiences, toileting). Consideration should be given, however, to *including* the student in activities or classes that do not specifically address learning objectives, particularly when they offer incidental learning opportunities in areas that have not yet been targeted as objectives or opportunities for social interaction and friendship building.

Designing an Integrated Daily Schedule

The culmination of the matrixing process is in designing a daily schedule for the student. In the elementary grades,

TABLE 4
Student Participation Options in
General Education Classroom Activities

Same:

Students who pose intensive challenges can participate in regular class activities by doing what all the other students are doing. Suppose a class is scheduled for Music and students are practicing songs for the annual holiday concert. All the students, including the student with special educational needs, pursue the *same* objectives within the same activities.

Multi-Level:

Multi-level curriculum/instruction occurs when students are all involved in a lesson within the same curriculum area but are pursuing different objectives at multiple levels based on their individual needs (Campbell, Campbell, Collicott, Perner, & Stone, 1988). For example, all the students may be in a reading lesson. The student with special needs is learning to identify (read) representations on a communication board (e.g., photos, line drawings, symbols) while others are learning to read orally with appropriate pauses to match punctuation. Multi-Level Curriculum/Instruction merely suggests an extension to include students with a wider range of abilities than is typically pursued within regular education. For example, in a math lesson one student is applying computational skills to a word problem and another is learning to count with correspondence. Both students are pursuing math learning outcomes but at different levels within the same activity or lesson.

Curriculum Overlapping:

Curriculum overlapping occurs when a group of students is involved in the same lesson, but pursuing goals/objectives from different curricular areas (Giangreco & Meyer, 1988, p. 257; Giangreco & Putnam, 1991). Suppose students are in science lab learning about properties of electricity. A student with special needs may be involved in these activities for the primary purpose of pursuing objectives from other curriculum areas (e.g., communication, socialization) such as following directions, accepting assistance from others, or engaging in a school job with a nonhandicapped peer. When curriculum overlapping takes place, the regular class activity is primarily a vehicle used to attain other goals. This approach opens many opportunities for students to participate in classes previously considered "inappropriate." These settings are selected because they offer opportunities to address identified needs.

Alternative:

Occasionally students may need to pursue *alternative* activities if the regular class does not offer reasonable opportunities to address relevant learning outcomes through multi-level curriculum/instruction or curriculum overlapping. For example, during a time when general education students are taking a half-hour paper-and-pencil test, it may be appropriate to work on community-based activities such as pedestrian skills, because activities such as this may not be addressed adequately within the regular class schedule. Similarly, certain management needs are appropriately met in private (e.g., catheterization or postural drainage may be carried out in the health office). Caution should be exercised when selecting alternative activities, because most student needs can be met in regular class situations given creative planning, a commitment to inclusion, and collaboration among professionals and families.

Source: From M. Giangreco, C. Cloninger, and V. Iverson (1990) *C.O.A.C.H.—Cayuga-Onondaga Assessment for Children with Handicaps* (6th ed.) (pp. 38–39) (Stillwater: Oklahoma State University). Copyright 1990 by National Clearinghouse of Rehabilitative Training Materials. Adapted by permission.

where classroom routines remain relatively stable, teams have found the information represented on the matrix to be particularly helpful in identifying when additional peer or adult support is needed and when adaptations in materials, instructional strategies, or curriculum are needed. In the middle and secondary grades, where students move from class to class and have individual schedules, the matrix has been used to select classes.

Even though a student with intensive needs will have scheduled "regular education" experiences, the schedule must remain flexible so that the student's team may arrange for alternative instruction (e.g., individual instruction, vocational education) when particular units or topics fail to match the student's needs. Even at the high school level, meshing challenges have been overcome and have resulted in intensively challenged students receiving *more* services in integrated versus separate activities (Giangreco, Cloninger, & Iverson, 1990).

EDUCATIONAL ROLES FOR DELIVERING THE CURRICULUM

As already mentioned, one of the responsibilities of school district leadership is to guide the school community through a process of curriculum examination in order to discover the "sameness" of general and special education curricula; merge duplicate content taught in separate programs (e.g., general versus special versus compensatory education) and distribute instruction of this content across instructional staff of formerly separate programs, and develop new curricular domains (e.g., social skills and responsibility). An associated responsibility of school leadership is to examine the need for new job roles or job functions so that the expanded curriculum may be delivered in integrated school and community settings. The *school-based employment specialist* and the *integration of support facilitator* are two specific job roles that have emerged in the last several years to enable an expanded curriculum to be delivered to a broader range of students in heterogeneous school and community settings.

School-Based Employment Specialists

Recent follow-up studies indicate high dropout and low employment rates for students with handicaps who have exited school (Hasazi & Clark, 1988; Hasazi, Gordon, & Roe, 1985; Mithaug, Horiuchi, & Fanning, 1985). In their examination of young adults labeled moderately, severely, and profoundly retarded, Wehman, Kregel, and Seyfarth (1985) found only 12% employed either part-time or full-time. In addition, their wages were extremely low. These data clearly attest to the need for additional vocational options to enhance

Regular Class Schedule

Name: Tommy Smith
Grade: 3

		Arrival	Current Events	Reading	Math	Lang. Arts	LUNCH	Recess	Science	Social Studies	P.E.	Art	Music
IEP GOALS	Summons Others	ML				ML	CO	CO			CO	CO	
	Makes Choices		ML	CO	CO	ML	CO	CO	CO	CO	CO	CO	CO
	Initiates Interactions	S				CO	ML	CO	CO	CO	CO	CO	CO
	Imitates Skills	ML	CO	CO	CO	CO		CO	CO	CO	CO	CO	CO
	Leisure with Others	ML			CO			ML					
GENERAL CURRICULUM	Physical Education										ML		
	Music												S
	Art											S	
	Socialization	ML	CO	CO	CO	CO	ML	ML	CO	CO	CO	CO	CO
	Communication	ML	ML	CO	CO	ML	S CO	ML	CO	CO	CO	CO	CO
	Personal Management	ML			ALT	ALT	ALT ML		ALT	ALT			
	Recreation/Leisure	ML				CO		ML					
	School Vocational (class jobs)	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO
MGMT NEEDS	Teach Others Commun.	CO	CO			CO		CO		CO			
	Provider Personal Care	ML			ALT	ALT	ML	ML	ALT	ALT			
	Positioning	ML	CO		→		→		→		→	→	
	Access Modifications (use #5)		CO					CO			CO		

S=Some ML=Multi-Level CO=Curriculum Overlapping A=Alternative

From M. Giangreco, C. Cloninger, and V. Iverson, 1990, *C.O.A.C.H.—Cayuga-Onodaga Assessment for children with Handicaps* (6th ed.) (p. 41) (Stillwater: Oklahoma State University, National Clearinghouse of Rehabilitative Training Materials. Copyright 1990 by National Clearinghouse of Rehabilitative Training Materials. Reprinted by permission.

**FIGURE 1
Sample IEP—General Education Matrix**

challenged students' employability.

The school-based employment specialist (SBES) is a secondary educator who works with a school district's guidance and vocational education department and community employers to expand the work experience and job skill training options so that students with intensive challenges and other students have needed work experiences before graduation. Cobb, Hasazi, Collins, and Salembier (1988) have provided a detailed description of the job functions of the SBES and have outlined the graduate-level program at the University of Vermont that prepares educators to serve as an SBES.

Integration/Support Facilitators

The integration facilitator or support facilitator is a second educational role that now is in place in a number of North American schools striving to educate intensively challenged students in local general education environments. An integration/support facilitator (ISF) may work at the elementary and/or secondary level in one or more school buildings or school districts. Job functions of the ISF include (W. Stainback & S. Stainback, 1990b):

- Fostering professional peer collaboration by team

teaching and organizing and serving on teacher and student support teams.

- Locating material, equipment, and specialized technical human resources.
- Adapting curriculum and instructional methods.
- Organizing students into peer tutoring, peer buddy, and other peer support systems.
- Facilitating home-school partnership and communication.
- Lobbying for necessary support (e.g., an instructional assistant for a classroom, state or federal grant support).
- Facilitating community "ownership" for integration activities and removal of traditional special education labels assigned to students, classrooms, teachers and programs.

Since 1986 the University of Vermont has offered a graduate training concentration that "retools" educators to serve as ISFs in inclusionary public schools (Thousand & Fox, 1989). Students in the program work four days a week in the school districts in which they are or will be functioning as an ISF. On the fifth day they attend courses on the university campus. Central to their training are competencies in collaborative teaming and consultation (Thousand et al., 1986; Nevin et al., 1990; Thousand et al., in press) as well as the other competency areas described in Table 5. As of this writing more than one third of Vermont's school districts employ at least one trained ISF in one or more of their schools.

Pitfalls to Avoid

S. Stainback and W. Stainback (1990b) have identified several potential pitfalls of creating an integration/support facilitator role within a school. These same potential pitfalls apply equally to the employment specialist role and any other educational role that emerges in response to the needs of a subgroup of the total school population.

One potential pitfall is that the ISF may be expected to work exclusively with intensively challenged students. This expectation is in conflict with the intended focus of the ISF role, which is to "serve as a resource to the teacher, family, principal, and the class as a whole in building support networks" (p. 34). Restricting the range of students with whom the ISF may work has many potential negative consequences. For one, it denies other students and staff access to valuable expertise. In addition, exclusive association of the ISF with certain students may set those students apart from their peers and interfere with their forming natural peer support networks and friendships.

A second pitfall has to do with the ISF being perceived as

the new "expert" in the system. Contrary to the desired role of the ISF as a model and coach in effective collaborative teaming and joint decisionmaking, many educators in the new ISF role find themselves being looked to as the expert responsible for solving the problems regarding certain students. Educators new to the role of ISF must be careful to demonstrate, through their behaviors, their belief in collaborative processes; they must model and expect others to demonstrate equity and parity (equal responsibility and power) in decisionmaking.

The Winooski (Vermont) School District dealt with this potential pitfall by initially training all support personnel (consulting teachers, speech and language pathologists, resource teachers) in core ISF competencies. Training in these same competency areas then was made available to all teachers, instructional assistants, and administrators. This training not only ensured that all support personnel and many other staff had enhanced skills for collaborating in heterogeneous classrooms; it also prevented perceptions that one person or one group of people were the "super special educators."

Finally, the ISF must be vigilant in *not* "oversupporting" a student. For a challenged student to increase independence and have access to natural peer support, adults (teaching assistants, the ISF, other support personnel) sometimes must step back a bit and observe what the student and the natural school ecosystem can do on its own to facilitate learning and relationship building.

The Role of Instructional Assistants And Common Concerns

As noted by Lindeman and Beegle (1988), employment of instructional assistants or paraprofessionals has increased dramatically since enactment of PL 94-142 in 1975. For many students with intensive educational challenges, particularly physically challenged students who will need personal attendants throughout their lives, the instructional assistant (IA) plays a vital support role. As a member of the classroom teaching team, the IA can provide a broad range of supports. These include assisting the teacher with clerical work, record keeping, and developing and preparing materials. IAs may provide students with physical assistance; and they may instruct, thereby bettering the adult/student ratio in the classroom and enhancing possibilities for individualized instruction. Studies suggest that IAs do spend most (60% to 70%) of their day instructing students, often in one-to-one arrangement (Harrington & Mitchelson, 1987; Mintzes, 1985; Vasa, Steckelberg, & Ronning, 1983).

While recognizing the tremendous potential of the IA as a support option for students with intensive educational needs, we must point out five commonly expressed concerns re-

TABLE 5
Competency Clusters for Integration/Support Facilitators

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| <p>1.0 <i>Training others.</i> Trainees will demonstrate their ability to train others (members of collaborative teams, general and special educators, teacher assistants, students with and without handicaps, parents and other family members, other school and community members) to implement effective instructional programs for learners who pose intensive challenges, demonstrate collaborative teaming skills, and articulate an understanding of best educational practices.</p> <p>2.0 <i>Technical assistance.</i> Trainees will demonstrate their ability to provide technical assistance to general and special educators, administrators, and community agency personnel to implement best educational practices and improve the education of learners who are challenged within their local schools and communities.</p> <p>3.0 <i>Best educational practices.</i> Trainees will identify, provide a rationale for, and be able to clearly articulate the benefits of "best educational practices" for all learners that address the issues of school climate and structure, collaborative planning, social responsibility, curriculum planning, delivery of instructional support services, individualized instruction, transition planning, family-school collaboration, and planning for continued best practice improvement.</p> <p>4.0 <i>Consultation, communication, and small-group skills.</i> Trainees will demonstrate knowledge of and the ability to implement techniques for building trust, effectively communicating, giving and receiving positive and negative feedback, and exhibiting appropriate leadership and conflict resolution styles with building-based support team members and other individuals concerned with the education of challenging learners.</p> <p>5.0 <i>Collaborative teaming and cooperative group learning.</i> Trainees will collaborate with building-based support teams of parents, general and special educators, students, and administrators to plan, implement, and evaluate strategies for edu-</p> | <p>cating all learners within their local public schools. Trainees will develop and implement cooperative learning lessons that accommodate learners with intensive challenges and their typical peers.</p> <p>6.0 <i>Supervision and peer coaching.</i> Trainees will provide direct feedback to teacher assistants, volunteers, peer tutors, peer buddies, and general and special educators, regarding the effectiveness of their instruction with learners who have intensive challenges, through clinical supervision and peer coaching conferences.</p> <p>7.0 <i>Strategies from general education and theory of instruction for adapting curriculum and instruction to promote the inclusion of learners with intensive challenges.</i> Trainees will identify and be able to clearly articulate characteristics of "effective schools" and strategies in general education for adapting curriculum and instruction promoting the inclusion of learners with challenges in general education learning environments. These strategies include peer tutoring, cooperative group learning, outcomes-based instruction, computer-assisted instruction, multi-aged groupings, and theory of instruction regarding cognitive learning.</p> <p>8.0 <i>Organizational skills (self and others).</i> Trainees will demonstrate the ability to manage their time and plan, schedule, and document their professional activities so they may evaluate their efficiency and effectiveness in achieving their goals and objectives.</p> <p>9.0 <i>Establishment, implementation, and evaluation of a service delivery model for serving all learners in local school general education settings.</i> Trainees will establish, implement, and evaluate their role as a specialist who supports local school general education placement for students with moderate and severe challenges within their respective school districts and assigned schools.</p> |
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garding the role of IAs in facilitating the inclusion of intensively challenged students:

1. The classroom teacher may not accept "ownership" for a student who comes with an IA, delegating responsibility for the child's instruction primarily to the IA.
2. The IA may become overprotective, overinvolved, or "attached at the hip" to the student.
3. The physical presence of the IA may impede interactions with peers.
4. IAs often are not included as members of student planning teams, even though the decisions of these teams usually have a great impact upon what the IA does on a day-to-day basis (most often expressed as a concern by IAs themselves). In addition, although IAs often are the least trained member of the team, they frequently are asked to engage in the most complex work (adapt-

ing, designing and implementing instruction) without adequate supervision or evaluation.

5. An administrative concern is the cost associated with hiring a full-time IA for each intensively challenged student or every student with a particularly "frightening" label.

Clearly, all of these concerns are valid. Administrators and teachers in Vermont schools, who are experienced with educating intensively challenged students in regular education, have wrestled with all of these issues and offer some strong advice:

1. Spend adequate time discussing and clarifying with the school community that the purpose of support is to enable a student to gain independence and form natural relationships with peers.

2. Clearly delineate the IA's job as a support to the teacher and the classroom as well as the challenged student.
3. Use collaborative teaming processes in planning, delivering, and evaluating instruction, and expect IAs to join the team as equally valued and vocal members.
4. Do not presume that all or certain intensively challenged students require full-time or part-time IA support. Instead, establish procedures for documenting the need for an IA. The documentation should require a description of the other types of accommodations and support already attempted.
5. Develop and regularly reexamine a plan for fading out the direct instructional and personal support the IA provides to the student. Many other adults and students can provide the same support, and an IA can in many ways share the responsibility with the challenged student's classmates for enhancing the quality of education.

PERSONNEL PREPARATION

Recommended Changes For Teacher Preparation Programs

School personnel are graduates of our colleges and universities. It is there that they learn there are at least two types of human beings and if you choose to work with one of them you render yourself *legally* and conceptually incompetent to work with the others. (Sarason, 1982, p. 258)

Sarason goes on to say that public schools are simply mirror images of today's colleges and universities. Sarason's words provide a powerful illustration of how the current division of teacher preparation programs into separate, distinct, and categorical special education programs (e.g., severe handicaps, learning disabilities, emotional disturbance, English as a second language) and general education concentrations hampers the ability of professionally prepared educators to either visualize or structure heterogeneous learning experiences that include students who, because of their *disabilities* or their exceptional *capabilities* and talents, are considered a challenge to educate. Graduates of personnel preparation programs have few models of adults collaborating across their disciplines or areas of expertise. Is it any wonder that general and special education have evolved as separate systems (Wang et al., 1988) or that Sarason and colleagues long ago called teaching the "lonely profession" (Sarason, Levine, Gødenberg, Cherlin, & Bennet, 1966, p. 74)?

S. Stainback and W. Stainback (1989) have offered a rationale and steps for facilitating merger of personnel preparation programs. They recommend that general and special education faculty sit down and analyze their curricula and

identify agreed-upon knowledge and skills concerning philosophies and processes of instruction and learning that they considered critical. A core set of courses, such as that recommended in Table 6, then could be developed and required of all education majors. In addition to this core, each student would take courses in one or more areas in which they wish to develop special competence (e.g., reading, behavior management, history, alternative communication systems, employment, individualized and adaptive learning strategies).

Integration/support facilitators simply would be school personnel with expertise in competency areas such as collaborative teaming and consultation, curriculum and instructional modification, and partner and cooperative learning structures. By restructuring professional preparation programs in this manner, graduates no longer would get the message that they have to perpetuate a dual system of education. Instead they would have the cognitive set and the preparation to instruct a diverse student body in their respective selected specialty areas.

TABLE 6
Common Professional Core of Courses
For All Educators

Courses	Credit Hours
1. Historical/Philosophical Foundations of Education	3
2. Child and Adolescent Development	3
3. Human Relations and Sensitivity to Human Differences	3
4. Classroom Organization, Management, and Motivational Strategies	3
5. Curriculum Design and Adaptations	3
6. Educational Measurement and Curricular-Based Assessment	3
7. Adapting Instruction to Individual Differences	3
8. Utilization of Audiovisual/Media/Computer Technology	3
9. Home, School, and Community Relations	3
10. Issues and Trends in Education	3
Total	30

Source: From S. Stainback & W. Stainback, 1989, "Facilitating Merger Through Personnel Preparation" in *Educating All Students in the Mainstream of Regular Education*, S. Stainback, W. Stainback, & M. Forest (Eds.), (Baltimore, Paul H. Brookes Publishing Company). Reprinted by permission.

A Recommended School District Inservice Training Agenda

Staff of schools committed to educating all of their students in the mainstream of regular education need to acquire a common conceptual framework, language, and set of technical skills in order to communicate about and implement practices which research and

theory suggest will enable them to better respond to a diverse student body. If personnel employed within the school have not received this training through their teacher preparation program, it becomes the job of those responsible for planning inservice for the local education agency to facilitate the formulation and ratification of a comprehensive inservice training agenda. This agenda may need to extend across several years to ensure that instructional personnel have the opportunity to progress from acquisition to mastery. (Villa, 1989, p. 173)

This statement acknowledges what many teachers have reported (Lyon, Vaassen, & Toomey, 1989), that neither their professional preparation nor their relatively isolated teaching experiences have adequately prepared them to meet the needs of a heterogeneous student population, including students who present intensive challenges. Fortunately, as Villa (1989) points out, schools do not have to wait for higher education to "get its act together" (p. 175) to empower staff to collaborate in the education of all children. He prescribes a four-tiered long-range inservice training agenda for school districts (see Table 7), which targets the entire community as the audience for the first tier of training. Training format options and incentives for encouraging participation also are suggested.

Higher Education, State Department of Education And School District Collaboration

In Vermont, collaboration between the State Department of Education and the state higher education institutions has been a critical factor in forwarding inclusionary education practices since the 1960s. In 1968, for example, this unique partnership created the *consulting teacher* special education professional preparation program (Christie et al., 1972; McKenzie et al., 1970), which enabled students with mild handicaps to receive special education support within regular classrooms. This mutually beneficial collaboration, envied throughout the United States, quickly expanded to include local school personnel as trainers of other adults. Classroom teachers and their consulting teacher partners provided practicum experiences for "consulting teachers-in-training" and coursework for local personnel to develop curriculum-based assessments, increase their behavior management and instructional adaptation skills, and keep abreast of current educational innovations.

In 1987, the Vermont Department of Education, integration/support facilitators from Vermont school districts, and University of Vermont faculty embarked upon yet another collaborative effort to jointly plan and deliver intensive week-long Summer Leadership Institutes to provide local school teams with critical knowledge and skills to educate students with intensive needs in regular education.

For a school team to attend the institute, two criteria must be met. First, the team must be *heterogeneous*, with representation from as many constituency groups as possible (e.g., the administration, general and special educators, parents, students, teaching assistants, guidance personnel, health personnel, speech and language pathologists). Second, the team must select at least one target student who is transitioning to the local school or for whom the team wishes to develop a more integrated daily schedule.

Training focuses upon four of the 10 competency core clusters in the integration/support facilitator training program (see Table 6), best educational practices (refer to Table 2 and 3); consultation, communication, and small-group skills; collaborative teaming; and strategies for adapting curriculum and instruction to promote the inclusion of learners with intensive challenges. The instructional format alternates between team work sessions and formal presentations by parents, administrators, teachers, related service personnel (e.g., occupational therapists, physical therapists, speech and language pathologists), instructional assistants, and students with and without handicaps. Each team has an assigned "facilitator" (a university faculty member, State Education Department technical assistant, or a trained integration/support facilitator) who is available to answer technical questions, guide team work, and observe and process with group members their effectiveness in collaborating and managing conflict. By the week's end, each team has developed a 16-step "action plan" for delivering support to their target student and enhancing collaboration among the adults and students of their school.

The primary objective of the institute is to create a sense of group cohesion and a common conceptual framework and language among team members so they are able to support one another in transferring their newly acquired knowledge and skills to colleagues in their "home school" in the fall. As of this writing, nine Summer Leadership Institutes have been attended by over 500 Vermont educators, parents, and community members from the majority of the state's 60 superintendencies. Teams from several U.S. states and Canadian provinces also have attended and replicated the institute in their own communities. In Vermont, local school teams, regional groups of integration/support facilitators, and the state I-Team (which supports students with multiple handicaps) have replicated the summer training or extended the training as a one- or two-semester course offering within local school districts.

SUMMARY

Skrtic (1987; 1988) has described schooling in North

TABLE 7
A Recommended Public School Inservice Training Agenda

Tier I	<p><i>Generic content relevant for all members of the school and greater community</i></p> <ul style="list-style-type: none"> • General education research regarding the characteristics of "effective schools" (Brookover et al., 1982) and current exemplary "best educational practices" from general and special education (Williams & Fox, 1990). • Models for adult collaboration and teaming and the development of small-group social skills Johnson & Johnson (1987a, 1987b); Thousand et al. (1986); Thousand et al. (in press).
Tier II	<p><i>Selected content to respond to self-identified training needs of parents and community members; for example:</i></p> <ul style="list-style-type: none"> • Legal rights and safeguards • IEPs • Behavior management • Community-based training • Transition between school environments • Transition to adult services • Post high-school follow-up
Tier III	<p><i>Training in assessment, behavior management, and instructional strategies for instructional personnel</i></p> <ul style="list-style-type: none"> • Outcome-based instructional models (Blook & Anderson, 1975; Guskey, 1985; Hunter, 1982), assessment models (Blankenship, 1985; Brown et al., 1989; Giangreco, Cloninger, & Iverson, 1990; Deno, 1985; Idol, Paolucci-Whitcomb, & Nevin, 1985; 1986; Ysseldyke & Christenson, 1987), and curriculum adaptation approaches (Campbell et al., 1988; Giangreco & Meyer, 1988) that enable teachers to discuss learner characteristics and make decisions about their own instructional behavior. • Cooperative group learning models (Johnson, Johnson, Holubec, & Roy, 1984; Slavin, 1984). • Computer-assisted instruction (Heerman, 1988). • Classroom and school-wide behavior management and discipline approaches (Becker, 1986; Glasser, 1986; Curwin & Mendler, 1988). • Methods for teaching and reinforcing students' use of positive social skills (Hazel, Schumaker, Sherman, & Sheldon-Wildgen, 1981). • The use of student peers as tutors in partner learning, buddies in nonacademic situations, and members of individual student IEP planning teams (Good & Brophy, 1987; Pierce, Stahlbrand, & Armstrong, 1984; Villa & Thousand, 1988).
Tier IV	<p><i>Training in peer coaching and clinical supervision for supervisory personnel</i></p> <ul style="list-style-type: none"> • (Cummings, 1985; Joyce & Showers, 1980; 1988).

Source: From Richard A. Villa, 1989, "Model Public School Inservice Programs: Do they exist?" *Teacher Education & Special Education*, 12, 173-176. Copyright 1989 by Special Press, San Antonio, TX. Adapted by permission.

America as a professional bureaucracy and argues that this paradigm diminishes teachers' ability to individualize for a great many students, including students with intensive educational needs. Skrtic explains:

The biggest problem is that schools are organized as professional bureaucracies . . . a contradiction in terms: Professionalization is intended to permit personalization; bureaucratization is intended to assure standardization. To blame the inability to individualize instruction totally on the capacity or will of professionals is misguided in that it blames the teacher for the inadequacies and contradictions of the organizational structure. This is the same kind of distortion of reality we make when we blame particular students for not learning from the existing standardized programs of the school organization. These students are the ones we call "handicapped," which is what I mean when I say that school organizations create "handicapped students." In both cases our tendency is to blame the victims—teachers who fail to individualize and students who fail to learn—for the inadequacies of the system. (Thousand, 1990, p. 31)

To enhance the capacity of schools to individualize for students, a "paradigm shift" is recommended: Educators should consider organizing into ad hoc teams (Patterson, Purkey, & Parker, 1986) or an *adhocracy* (Skrtic, 1987) so that educators may "mutually adjust their collective skills and knowledge to invent unique, personalized programs for each student" (Thousand, 1990, p. 32). In this new paradigm, the teacher is an inventor who has an implicit understanding that educational programs will have to be:

. . . continuously invented and reinvented by teachers in actual practice with students who have unique and changing needs. . . . The value of the adhocracy is that it is configured for diversity whereas the professional bureaucracy is configured for homogeneity, and so must remove diversity from the system through means like special education and other pull-out programs. (Thousand, 1990, p. 32)

What is suggested here is the need for organizational restructuring of schools. This restructuring already has begun. Ad hoc collaborative problem-solving and teaching teams composed of adults and students currently are emerging across North America in inclusion-oriented schools (see Nevin et al., 1990; Thousand & Villa, 1989; 1990; Villa & Thousand, in press). These schools are right in the *middle* of a paradigm shift toward an "ideal" school structure of multiple ad hoc groups, which form and dissolve as needed to address the instructional and organizational barriers to the invention of personalized learning opportunities. Thousand et al. (in press) offer a detailed description of this ideal school for the 21st century and a scenario of how a school in the middle of a paradigm shift might transfer to the adhocratic structure.

We encourage an end to discussions of *where* students labeled severely or multiply handicapped can or should be educated. Instead, we propose that the discussion go another way, that it focus upon how to document, further refine, and disseminate the instructional, organizational, and technological innovations that allow neighborhood schools to respond to the diverse educational and psychological needs of any learner (Williams, Villa, Thousand, & Fox, 1990). Furthermore, teachers and administrators of each school building need to discuss how they will reorganize so that educators, students, and community members may form planning and teaching teams empowered to invent the future in the ad hoc fashion Skrtic prescribes.

"Student diversity is only a problem because of the kind of school organization we have" (Holmes Group, 1990). But that organization can and is now changing. We, therefore, propose a united advocacy effort to promulgate national policy prohibiting segregated education for any youngster entering school in the 21st century. This gives us this entire last decade of the 20th century to further research and refine strategies for inclusion and personalized instruction, not only for students with intensive educational needs, but for all students.

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