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Rethinking Special Education

A comprehensive approach combining the best features of special and regular education offers the best chance of overcoming the disjointedness of present categorical programs.

In the decade since enactment of P.L. 94–142, significant progress has occurred in the provision of equal access to free and appropriate education for all students. These accomplishments can be celebrated, but two barriers block the full promise of the law: the continuing segregation of many students in disjointed programs and the inconsistent system for classifying and placing these students.

The "special," "compensatory," and "remedial" education programs that have proliferated over the last 20 years have been initiated, for the most part, independently of other programs. Funding, entitlement procedures, and administrative rules for these programs are separate from each other and from the mainstream of regular education.

If individualized planning and appropriate academic goals characterize the learning of all students, then it should be possible for more students to learn as this junior high school student does, studying content areas in special classes and attending regular classes for art, music, physical education, and introduction to occupational education.

Photograph by Nancy Pline, courtesy of Kathleen Monti and Nancy Dorman, New York State Department of Education

The widely used "pull-out" approach—removing students with special learning needs from regular classes—has been the predominant strategy for structuring programs to improve the educational attainment of students with special learning needs. Although well intentioned, the pull-out approach neglects the larger problem: regular classroom learning environments have failed to accommodate the educational needs of many students. The pull-out approach is driven by the fallacy that poor school adjustment and performance are attributable solely to characteristics of the student rather than to the quality of the learning environment. This approach often causes serious problems. It has led to discontinuity and interruption in the instruction for teachers and students, loss of control by school district leadership over specialized programs, and the fostering of narrow categorical attitudes and instructional programming (Heller et al. 1982, Reynolds and Wang 1983).

Many of the current classification systems for students with special learning needs are educationally ineffective and burden schools with excessive administrative, teaching, and financial costs (Heller et al. 1982, U.S. House of Representatives 1983). In some cases, federal and state regulations impose unnecessary uniformity on local school staff and

drain human and financial resources away from the direct provision of educational services (Reschly in press, Reynolds and Wang 1983). Consequently, highly productive techniques such as mastery learning, adaptive education, and school-based home enrichment (Lloyd in press, Morsink et al. in press), which might enable students with special learning needs to remain in regular classrooms, may not be used to their full potential.

Problems of Classification

The concern about classification raised in reviews of research and practice in special education is hardly new (Wang et al. in press). Based on findings from his major work focusing on issues in this area, Hobbs (1975) concluded that the approaches used to classify and place students in special education programs were "a major barrier to the efficient and effective delivery of services to them and their families" (Hobbs 1980, p. 274). More recently, a National Academy of Sciences panel (Heller et al. 1982), which investigated the disproportional percentages of minority and male children in special education programs, suggested that "the placement team that labels and places a child in a special program [should] demonstrate that any differential label used is related to a distinctive prescription for educational practices . . . that lead to improved outcomes" (Heller et al. 1982, p. 94). Present practices fall far short of this standard. Classification often is influenced by many factors other than children's needs: space and professional staff availability; competing programs and services; and federal, state, and local guidelines and pressures (Keogh in press).

State differences in eligibility criteria contribute to inconsistent classification practices and services to students. This inconsistency is illustrated by the differences across states in the annual increases in special education students from 1977–78 through 1980–81. In this four-year period the growth rate for percentages of learning disabled students served ranged from 1.5 percent in Utah to 40 percent in the District of Columbia; the growth rate for mentally retarded students ranged from -14 percent in South Dakota to 11 percent in Vermont; and the growth rate for emotionally disturbed students ranged from -5 percent in Washington to 49 percent in Mississippi (Moore et al. 1982).

Although the regulations for administration of P.L. 94–142 specify 11 different classifications of handicapping conditions—deaf, deaf-blind, hard of hearing, mentally retarded, multihandicapped, orthopedically impaired, other health impaired, seriously emotionally disturbed, specific learning disabled, speech impaired, and visually handicapped (Federal Register 1977)—most diagnoses of students placed in special education programs are based on social and psychological criteria. These include measured intelligence, achievement, social behavior and adjustment, and communication and language problems. Less than 20 percent of special education students are classified according to rigorous physical or physiological measures (Reschly in press). Furthermore, many of the measuring criteria used in classification lack reliability and validity, and a small change in any of the criteria—such as lowering of the IQ criterion by five points—can cause large changes in the percentages of students classified in given categories.

Classification has been particularly troublesome with respect to the category of learning disability. Compared to an increase of 16 percent for individuals identified in all categories of handicapping conditions between academic years 1976–77 and 1984–85, the increase of learning disabled students was 119 percent (Keogh in press). More than 80 percent of normal students could be classified as learning disabled by one or more definitions now in use (Ysseldyke in press). The widely varying percentages of students classified as learning disabled suggest disparities and anomalies that are difficult to resolve.

Overlapping Programs and Services

Federal programs for students with special learning needs often overlap. Special education overlaps with Chapter 1, which is intended for low-achieving students from low-income families; with migrant programs, particularly for children of migrant farm workers; and with bilingual education. What students in these programs often have in common is low academic achievement.

Uncertainties abound in the placement of students with special learning needs in these overlapping programs. Legislation is unclear as to the degree of poverty or the achievement required for eligibility to receive Chapter 1 services. Similarly, there are questions regarding eligibility for migrant education services. (For example, should migrant education programs continue to serve students for more or less than three years after their last move?) In the area of bilingual education, the multiplicity of foreign languages and the imprecise measures of students' competence in English make diagnoses difficult. Thus, students with identical characteristics could qualify for different special, compensatory, or remedial education programs, depending on the states or school districts in which they reside and on the particular criteria used by individuals on school staffs. Often the greater the number of students who are classified, the more money and administrative complexity that are brought to a school. Special equipment may be purchased for some classified students, but there may be restrictions on use of the equipment by students in other classifications. In cases of multiple classifications for the same students, there may be insufficient hours in the school day to remove the students for all the segregated pull-out programs to which they are entitled.

The multiplicity of classifications and programs may reflect ineffective identification rather than true distinctions in learning ability (Keogh in press). Even if true differences among the subgroups of learners could be determined, it is often appropriate to use similar instructional principles and methods to accommodate a variety of needs (Gerber in press). In their finding of "little empirical justification for categorical labeling that discriminates mildly mentally retarded children from other children with academic difficulties" (Heller et al. 1982, p. 87), the National Academy of Sciences panel went beyond the field of special education. The panel stressed the need for improving classification and placement guidelines and procedures for total school systems, not just for special education.

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Prospects for Better General Education

The full development of students' talents cannot be achieved without increasing educational productivity for all students. If we are to be prepared to face the challenges posed by projected demographic, economic, and technological realities, we must begin to make structural changes in our educational system now. Clearly, the present approach to providing educational support for students with special learning needs is not working acceptably. It does not ensure the kind of accountability that is desired by child advocates and educators. Furthermore, the current practices of preplacement and reevaluation that focus primarily on determining eligibility for services are excessively costly and ineffective (Reschly in press).

It seems likely that the coming decade will make the faults in present practice all the more obvious. The projected demographic changes include growing enrollments of minority students (U.S. Bureau of the Census 1983), who typically have been more likely than other students to be identified as requiring special or compensatory education services; and continuing increases in the percentages of students below age 18 who live in poverty and, therefore, face the strong likelihood of being singled out for remedial or other special services (Children Trends 1985, U.S. Bureau of the Census 1982).

Because categorical programs are often expected to accomplish what is not done by general education, we need to find ways to restructure special education and other compensatory and remedial programs in the context of the entire educational system. If students with special learning needs are to progress and become more fully integrated in regular classes, regular and special education staff must work together to establish new partnerships in education—partnerships between states and the federal government, between states and local districts, between regular and special educators, and between educators and parents. The barriers that, up to now, have separated these groups must be removed (Will 1984).

Providing an effective education for all students requires the expansion of productive programs and practices, experimental waivers of existing rules and regulations for some local districts, and greater autonomy for professionals and parents to make decisions for students at the local level. Within this framework, special educators should be expected to concentrate on students who need the most extensive and intensive help. We do not foresee less need for specialists, but we do propose that their work be integrated into the planning and operation of the regular school.

We propose a two-part initiative to attain this objective. First, we recommend joining practices from both special and general education into a coordinated educational delivery system. This system would combine methods that have a strong research record of effectiveness with comprehensive systems of instruction that have evolved from both general and special education.

Second, we urge the federal government to collaborate with a number of states and local districts in experimental trials of more integrated forms of education for students who are unjustifiably segregated in separate programs. These trial efforts should assure accountability to parents of students in protected classes according to federal and state legislation.

Research and Practical Bases for Change

Recent syntheses of research on what makes learning more productive suggest ways of delivering instruction that are substantially superior to traditional and widespread practices (Walberg and Wang in press). Table 1 presents a general overview of this knowledge base derived from an integrative analysis of the recent research literature (Good 1983, Walberg 1984, Wang et al. in press).

Features of Effective Classroom Learning Environments

Instructional content that is:

- essential to further learning
- useful for effective functioning in school and in society at large
- clearly specified
- organized to facilitate efficient learning

Assessment and diagnosis that:

- provide appropriate placement in the curriculums
- provide frequent and systematic assessment of progress and feedback

Learning experiences in which:

- ample time and instructional support are provided for each student to acquire essential content
- disruptiveness is minimized
- students use effective learning strategies/study skills
- each student is expected to and actually experiences success in achieving mastery of curriculum content, and accomplishments are reinforced
- alternative instructional strategies, student assignments, and activities are used

Management of instruction that:

- permits each student to master many lessons through independent study
- permits each student to plan his or her own learning activities
- provides for students' self-monitoring of their progress with most lessons
- permits students to play a part in selecting some learning goals and activities

Collaboration among students that:

- enables students to obtain necessary help from peers
- encourages students to provide help
- provides for collaboration in group activities

Table 1. Examples of Features of Effective Classroom Learning Environments and Expected Related Student Outcomes

	Expected Student Outcomes												
	Mastery of Subject Matter Content		Acquisition of a Variety of Learning Skills			Development of Positive Attitudes Toward Learning				Development of Positive Self-Perceptions			
	Mastery of content and skills for effective functioning	Mastery of content and skills for further learning	Ability to study and learn independently	Ability to plan and monitor learning activities	Ability to obtain assistance from others	Enjoyment in taking part in learning activities	Viewing help-giving and help-receiving as positive experiences	Special interest in certain learning areas	Motivation for continuing learning	Confidence in one's ability as a learner	Confidence in oneself as a contributing member of the school/community	Confidence in one's ability to take self-responsibility for learning and behavior	Perceptions of internal locus of control
	■	■						■		■			
	■	■						■	■				
	■	■	■	■						■		■	
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*The shaded sections indicate that extant findings from studies on effective teaching and learning suggest relationships between the implementation of specific features and the achievement of particular student outcomes.

The first column of Table 1 lists features of effective classroom learning environments. The corresponding expected outcomes are grouped into four categories: mastery of subject matter content, acquisition of a variety of learning skills, development of positive attitudes toward learning, and development of positive self-perceptions. The shaded areas indicate that there are findings to suggest relationships between the implementation of specific features and the achievement of particular student outcomes. Programs, for example, that include frequent, systematic evaluation of progress and feedback are associated with at least seven expected student outcomes: mastery of content and skills for effective functioning, mastery of content and skills for further learning, ability to study and learn independently, ability to plan and monitor learning activities, ability to obtain assistance from others, motivation for continuing learning, and confidence in one's ability as a learner. The kind of information on effective program features and related expected outcomes shown in Table 1 suggests that a substantial knowledge base can be applied to improving current practice in regular and special education programs.

Waivers for Performance

We propose that waivers be granted to local school districts and states that wish to integrate categorical programs. The waivers would guarantee school districts' categorical funds during experimentation, so long as data were supplied on how the new approaches to instruction were working with respect to resource expenditures, delivery of services, and educational outcomes.

It is important to note that we are *not* asking to move from categorical to block grants. In the case of special education and other major categorical programs, many communities are not ready for block grants, and the hard-won targeting of students for intensive help would be lost. We *are*, however, rejecting the shifting of boundaries defining categories. With mounting economic pressures and embarrassment over the unreliability of classifications, government officials and legislators might use this strategy to "cap" one or more categories. For example, the definition of learning disability could be tightened in various ways to decrease the numbers of identified learning disabled students. Such an approach, which focuses only on fiscal concerns, does not improve instruction. Instead, it tends to heighten the level of bureaucratic intrusion into instructional matters and to frustrate students, teachers, and parents.

It would be better to focus the resources of special, compensatory, and regular education on the most promising ideas for improving instruction. Many worthy ideas and demonstrated practices could be encouraged under a waiver for performance provision. Waivers for performance would permit and support the testing of those ideas so that the next decade could witness a strong, data-based approach to revisions of practice. Some school districts, for instance, are ready to try new approaches to assessment and decision making. Others wish to adopt broadly framed systems for instructional management. Some might want to try new forms of coordinated planning at the building level; others might experiment with new forms of personnel preparation and deployment.

To provide greater state and local autonomy, certain federal and state rules would have to be waived to permit broader, better coordinated programs for students now treated in separate categories. Such programs, however, would have to continue to evaluate each student's educational progress and social integration into regular education. Experimentation would proceed only when bureaucracies permit flexibility in programs, offer assurances about hard-won rights to parents, and remove financial disincentives for responsible changes.

This two-part initiative has several advantages over current approaches. Money and human resources can be saved by avoiding useless classifications, ineffective programs, and unnecessary procedures. Comprehensive programs and waivers of overly detailed prescriptions can yield more positive prospects for local control, professional autonomy, and student achievement. They also can result in regular and special education school staffs initiating programs that are grounded in an accumulated research base and suited to parents' desires, students' needs, and local circumstances. Through such an initiative, staff energies would be concentrated less on psychometric diagnosis and classification and more on schooling

Expectations for Quality and Achievement in Special Education

A serious challenge to educators determined to reform their schools is seeing that students with handicapping conditions receive an education comparable to that of their nonhandicapped peers. Since the passage of Public Law 94–142, extensive changes have been made in schools to increase handicapped students' access, but many educators are unintentionally short-changing the students by not expecting enough from them. The time has come to move beyond the procedural emphasis of the last decade to an emphasis on quality instruction.

In New York State, for example, approximately 75 percent of the students identified as educationally handicapped are in the categories of learning disabled, speech impaired, emotionally disordered, health related, deaf or hearing impaired, visually impaired, or orthopedically handicapped. The vast majority of the 286,000 students identified as disabled have one thing in common: their disabilities do not necessarily reflect diminished intellectual capacity.

We cannot enter the '90s continuing to ask the same questions we asked in the '70s: Are all handicapped children identified? Are there procedures in place to assure their due process rights? Is the public education system meeting its basic responsibility? Instead, we should be asking how many students with handicapping conditions master the competencies of required high school course work. How many leave school as independent, well-educated young adults? How many find jobs to match their talents? For responsive educators, the answers to these questions should be part of the reform agenda for the next decade.

—By Lawrence C. Gloeckler, assistant commissioner, and Marie Cianca, administrative coordinator, Office for Education of Children with Handicapping Conditions, New York State Education Department, Room 1073, EBA, Albany, NY 12234.

"Schools will accommodate a wide range of individual differences only when systematic changes have been made and when resources now spread among many disparate programs have been constructively joined."

content and instruction.

The aspiration expressed in P.L. 94–142 has been the provision of appropriate education for all children and youth—even those most difficult to teach—within the regular schools of the community. Remarkable progress is evidenced in the facts that very nearly all school-age children and youth are in school and that the majority are in regular schools most of the time. Current practices, however, still leave a good deal of separateness, disjointedness, and inefficiency. What we must do is restructure school programs to more completely integrate students with special learning needs into regular school programs, using all forms of knowledge on how best to proceed with instruction. □

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References

Children Trends. *The School-Aged Handicapped* (NCES 85–400). Washington, D.C.: U.S. Government Printing Office, 1985.

Federal Register. "Regulations for Implementing the Education for All Handicapped Children Act of 1975 (Public Law 94–142)" *Federal Register* 42 (23 August 1977): 42, 474–482, 518.

Gerber, M. M. "Application of Cognitive-Behavioral Training Methods to Teaching Basic Skills to Mildly Handicapped Elementary School Students." In *The Handbook of Special Education: Research and Practice*, edited by M. C. Wang, M. C. Reynolds, and H. J. Walberg. Oxford, England: Pergamon Press, in press.

Good, T. L. "Classroom Research: A Decade of Progress." *Educational Psychologist* 18 (1983): 127–144.

Heller, K., W. Holtzman, and S. Messick, eds. *Placing Children in Special Education: A Strategy for Equity*. Washington, D.C.: National Academy of Sciences Press, 1982.

Hobbs, N., ed. *The Futures of Children*. San Francisco: Jossey-Bass, 1975.

Hobbs, N. "An Ecologically Oriented Service-Based System for the Classification of Handicapped Children." In *The Ecosystem of the "Sick" Child: Implications for Classification and Interventions for Disturbed and Mentally Retarded Children*, edited by S. Salzinger, J. Antrobus, and J. Glick. New York: Academic Press, 1980.

Keogh, B. K. "Learning Disabilities: Diversity in Search of Order." In *The Handbook of Special Education: Research and Practice*, edited by M. C. Wang, M. C. Reynolds, and H. J. Walberg. Oxford, England: Pergamon Press, in press.

Lloyd, J. W. "Direct Academic Interventions in Learning Disabilities." In *The Handbook of Special Education: Research and Practice*, edited by M. C. Wang, M. C. Reynolds, and H. J. Walberg. Oxford, England: Pergamon Press, in press.

Moore, M. T., L. J. Walker, and R. P. Holland. *Finetuning Special Education Finance: A Guide for State Policymakers*. Princeton, N.J.: Educational Testing Service, 1982.

Morsink, C. V., C. V. Thomas, and J. Smith-Davis. "Noncategorical Special Education Programs: Process and Outcomes." In *The Handbook of Special Education: Research and Practice*, edited by M. C. Wang, M. C. Reynolds, and H. J. Walberg. Oxford, England: Pergamon Press, in press.

Reschly, D. J. "Learning Characteristics of Mildly Handicapped Students: Implications for Classification, Placement, and Programming." In *The Handbook of Special Education: Research and Practice*, edited by M. C. Wang, M. C. Reynolds, and H. J. Walberg. Oxford, England: Pergamon Press, in press.

Reynolds, M. C., and M. C. Wang. "Restructuring 'Special' School Programs: A Position Paper." *Policy Studies Review* 2 (1983): 189–212.

U.S. Bureau of the Census. *Statistical Abstracts of the United States, 1982–1983*. Washington, D.C.: U.S. Government Printing Office, 1982.

U.S. Bureau of the Census. "Projections of the Populations of the United States: 1982 to 2050." *Current Population Reports* (Series P25, No. 922). Washington, D.C.: U.S. Bureau of the Census, 1983.

U.S. House of Representatives. *The Report from the Commission on the Financing of a Free and Appropriate Education for Special Needs Children*. Washington, D.C.: U.S. House of Representatives, 1983.

Walberg, H. J. "Improving the Productivity of America's Schools." *Educational Leadership* 41 (May 1984): 19–27.

Walberg, H. J., and M. C. Wang. "Effective Educational Practices and Provisions for Individual Differences." In *The Handbook of Special Education: Research and Practice*, edited by M. C. Wang, M. C. Reynolds, and H. J. Walberg. Oxford, England: Pergamon Press, in press.

Wang, M. C., M. C. Reynolds, and H. J. Walberg, eds. *The Handbook of Special Education: Research and Practice*. Oxford, England: Pergamon Press, in press.

Will, M. C. "Let Us Pause and Reflect—But Not Too Long." *Exceptional Children* 51 (1984): 11–16.

Ysseldyke, J. E. "Classification of Handicapped Students." In *The Handbook of Special Education: Research and Practice*, edited by M. C. Wang, M. C. Reynolds, and H. J. Walberg. Oxford, England: Pergamon Press, in press.

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