

## THE MEANING AND PRACTICE OF INCLUSION FOR STUDENTS WITH LEARNING DISABILITIES: THEMES AND IMPLICATIONS FROM THE FIVE CASES

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Since the passage of the Education for All Handicapped Children Act (P.L. 94-142) nearly two decades ago, the focus of special education for individual students with learning disabilities (LD) has shifted from an emphasis on *what* and *how* to teach to an emphasis on *where* to teach. Discussions of practice used to be about individually prescribed instruction typically delivered outside of the general education classroom; discussions of practice these days are about group-oriented interventions or accommodations delivered within general education classrooms. Preservice teacher preparation in the 1970s stressed competencies in diagnostic-prescriptive teaching (Lerner, 1971) or response-contingent instruction (Zigmond, Vallecorsa, & Silverman, 1982) and the development of individually tailored instructional plans implemented one-to-one in resource rooms or self-contained classes (Faas, 1980). During the 1980s, it was common practice to administer elaborate assessments of students with LD, using both formal and informal tests, to document skill deficiencies in language, academic, and social domains, and to provide a carefully sequenced plan of remedial instruction, one-to-one or in very small groups, to correct the deficiencies. By the 1990s, however, we are being challenged to rethink special education services to students with LD, to abandon pull-out, diagnostic-prescriptive skill building, and to return students more completely to general education settings while delivering whatever specially designed instruction is needed within the confines of the general education class.

Many practitioners and university faculty have responded to the gauntlet thrown down by Will (1986) in her call for a new vision of services for students with LD. The public school programs we described in the preceding cases all represent variations on the theme of including students with LD completely, or almost completely, in general education classrooms. In these case studies, we have tried to describe the richness of these variations. We have reported how inclusion operates from the perspective of the adults in each school by describing the roles and responsibilities of the various actors in the process of educating students with LD. But we have also paid particular attention to what the specific educational program feels like and looks like from the perspective of the individual student

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with LD. We have tried, especially, to understand whether, in these more inclusive models, students with LD are getting the *special* education to which they are entitled by federal and state mandate.

Now we will integrate across cases, exploring both the common threads running through the models and the significant differences. To accomplish this, we first developed a matrix displaying data for each of the five sites along the four dimensions we used to organize the case reports (i.e., context for inclusion, model of inclusion, role of special education teachers, and educational experiences of students with LD; see Table 1). Next, we searched for common themes across sites within each dimension. Finally, we examined the reports to identify unique ways each site went about educating students with LD. This process of analysis and synthesis led us to conclusions about current practice in educating students with LD in inclusive settings and to implications of these conclusions for policy and teacher education.

The purpose of this article is to identify these common themes and unique features across the five sites and to discuss the implications of the cases for policy and for personnel preparation. The first section outlines the common themes and unique characteristics; the second section addresses the implications for policy decisions regarding educational services for students with LD and for the preparation of special education personnel.

## COMMON THEMES AND KEY DISTINCTIONS AMONG SITES

The five school sites in which we collected data were different. They were located in five different states, scattered from the Southeast (VA) to the Northwest (WA). The schools represented urban (KS), suburban (VA and MN), and rural (PA and WA) environments. Three schools served students in Grades K–5 (VA, PA, and KS), one served Grades K–6 (WA), and the fifth (MN) housed K–4 in a primary school and 5–6 in an intermediate building. School populations ranged from 315 to 1,650 students, but the proportion of students with LD in each building seemed unrelated to school size. Pennsylvania, with 460 students, served 4.1% of the school population as LD; the Washington school, with just over 400 students, had 10.4% of students with IEPs. In the largest school, the Minnesota intermediate school, 12.1% of the 1,650 students were assigned the LD label; but in the smallest school, in Kansas, more than 14% of the 315 had IEPs. Because the number of students to be served fluctuated so widely, the number of special education teachers in each building also varied. Two schools (PA and WA) had 1.0 or 1.5 full-time-equivalent special education teachers as resources to their inclusion models; other schools had three to seven special education teachers. The numbers of students to be served and the numbers of special education teachers assigned influenced, and in turn were influenced by, the design of the inclusion model. Despite these demographic variations, we did identify strong thematic consistencies across models. We have organized the discussion of common themes and unique features across sites according to the dimensions used to describe each of the cases: model of inclusion, role of the special education teacher, and educational experiences of students with LD.

### *The Models: There's More than One Way to Skin a Cat!*

We opted to visit schools that would differ in their approach to inclusion, and indeed, sites differed widely in terms of who provided the leadership and motivation for the change in services, how school personnel were selected to participate in the new model, how students with LD were distributed into general education classes, and the nature of the *special* education that was provided. We address each of these points below.

*Using External Versus Internal Forces of Change.* Some of the sites implemented university-developed models that reflected, at some point in the history of the school, a university-school collaboration. The Pennsylvania school had had technical assistance from University of Pittsburgh faculty for 3 years in implementing the Mainstream Experiences for the Learning Disabled (MELD) model (Zigmond et al., 1995). The Washington model represented a 4-year collaboration between the school and University of Washington faculty. And the Kansas model was an outgrowth of the Class-Within-A-Class model developed by faculty at the University of Kansas (Reybaud, Pfannenstiel, & Hudson, 1987), adapted and renamed the Collaborative Teaching Model by school-building personnel. These three University-developed models included multiple components derived from the effective schools literature (e.g., peer tutoring, cooperative learning groups, new reading strategies, modifications in testing and grading procedures, teacher assistance teams). These models were also developed expressly to explore the feasibility and usefulness of including students with LD in general education classrooms.

In the remaining sites (VA and MN), the models were developed locally, without consultation with university faculty. These models reflected the ideas and expertise of special education teachers and supervisors. They were more focused and limited in scope than the models developed cooperatively with university personnel, emphasizing one component (e.g., learning strategies, alternative reading strategies) to meet the needs of diverse groups of students.

*Choosing Personnel to Participate.* In three of the models (VA, MN, and KS), a high premium was placed on sending students with LD only to teachers who had volunteered to be part of an inclusion effort. In these three sites, both the school principal and the teachers claimed that the success of an inclusion program depended on finding personnel who *wanted* to participate. One special education teacher in Kansas reported that, during the first year of implementation, general education teachers had been *assigned* to the Class-within-a-Class model and had resisted working with a special education partner. According to the principal:

I don't make anyone here get into it. When the first-grade [special education] teacher wanted to do it, I said you have to go out and recruit these people [mainstream colleagues], because it's you they're going to have to work with. So I said you just have to convince them that working with you is going to be great and that those little retarded children that are following them up and down the hall really aren't as terrible as they seem. (5/3/93)

TABLE 1  
THEMES ACROSS THE FIVE MODELS

Theme	Virginia	Pennsylvania	Minnesota	Kansas	Washington
Context for inclusion	Suburban K-5 grades 700 students; 5% with LD 1 SE teacher	Rural K-5 grades 460 students; 4% with LD 1.5 SE teachers	Suburban K-4 grades in primary school; 5-6 intermediate school Prim: 410 students; 3% with LD Inter: 1,650 students; 12% with LD Prim: 2 SE teachers Inter: 7 SE teachers	Urban K-5 grades 315 students; 14% with LD 3 SE teachers	Rural K-6 grades 400 students; 10% with LD 1 SE teacher
Model of inclusion	Local model Focus on learning strategy instruction	University model Multiple components (e.g., CBM, reading strategies, problem-solving teams, modified grading)	Local model Focus on alternative reading strategies	University model Focus on learning strategy instruction	University model Multiple components (e.g., peer tutoring, cooperative learning, CIRC reading, alternative phonics instruction)
Role of special education teacher	Volunteer teachers Students with LD clustered Preset schedule with 3 GE teachers Direct instruction to students with IEPs in small & large groups	Schoolwide effort Students with LD distributed Preset schedule in all GE classes Direct instruction to students with IEPs in small & large groups & 1:1	Volunteer teachers Students with LD clustered Preset schedule Direct instruction to students with IEPs in groups (1:1 in pull-out)	Volunteer teachers Students with LD clustered Preset schedule with 3 to 4 teachers Direct instruction to students with IEPs in large groups	Schoolwide effort Students with LD distributed Flexible schedule in all GE classes Direct instruction to students with IEPs in small groups

(table continues)

TABLE 1  
(CONTINUED)

Theme	Virginia	Pennsylvania	Minnesota	Kansas	Washington
Educational experiences of students with LD	Coteaching nondisabled students by dividing class or alternating presentation	Coteaching nondisabled students by dividing class	Coteaching nondisabled students by monitoring individuals	Coteaching nondisabled students with both teachers addressing whole class	Coteaching nondisabled students by monitoring individuals
	Copanning time built into schedule	Copanning time built into schedule	Copanning when possible	Copanning time built into schedule	Copanning when possible
	Modified materials, assignments, and tests for all students	Modified materials, assignments, and tests for all students	Modified materials, assignments, and tests for all students	Modified materials, assignments, and tests for all students	Modified materials, assignments, and tests for all students
	Remediation in resource room	Remediation/tutoring as time permits during school or with tutor before or after school	Remediation with alternative instruction during school day	Remediation with study buddy	Remediation with alternative instruction during school day and before and after school
	Extra practice and reteaching integrated into general education	Reteaching in small groups; occasional 1:1 instruction	Extra practice in resource room unrelated to mainstream curriculum	Extra practice integrated into general education	Extra practice through cross-age peer tutoring
	1:1 help from peers	1:1 help from peers and paras	1:1 help from peers	1:1 help from peers	1:1 help from peers and paras

Note. LD = learning disabilities; SE = special education; GE = general education; IEP = Individualized Education Program; CBM = curriculum-based measurement; prim = primary; inter = intermediate; CIRC = Cooperative Integrated Reading and Composition.

In these three sites, finding just the right mix of people was critical to making the model work. The result was that in Virginia, only 3 of 24 classrooms were involved in the inclusion program; in Kansas, the collaborative teaching model was implemented in half the school; and in Minnesota, 8 of 12 teachers in the elementary building and 7 of 10 teams (with only 2 of 6 members of the target sixth-grade team) in the intermediate school were involved in the inclusion program.

In contrast, in the remaining two sites, changing special education service delivery was considered a schoolwide effort and *all* teachers in the school were involved. This did not mean that some students with LD were assigned to each teacher in the building; sometimes there were just not enough students at each grade level for that to occur. But in Pennsylvania and Washington, all teachers participated in inservice training, all teachers received some in-class coteaching support from the special education teacher or paraprofessional, and all teachers implemented the changes in instructional processes that were intended to help teachers reach students who were difficult to teach. In both schools, some teachers were reported to have been unenthusiastic at the beginning of these projects, but the Pennsylvania principal contended that skeptical teachers in his building had been influenced positively by the students' successful experiences throughout the year and had been "won over" to the model. In Washington, teachers who were unwilling to work with diverse groups of students were given the choice to transfer to another building. The Washington principal described her expectations: "You have to start saying that all of the children come in; I can teach all of the children" (5/19/93).

*Distributing Students with LD to General Education Classrooms.* Another way in which the models differed was in their approach to assigning students with LD to general education classrooms. In the models in Virginia and Kansas, six to eight students with LD were clustered together and assigned to one general education classroom. This arrangement was, of course, consistent with the schools' decision to involve only a few volunteer teachers in the inclusion model. It also allowed the special education teacher to spend a longer part of each school day in the few inclusion classrooms (1.5 hours per day in Virginia; 3 to 4 hours per day in Kansas).

In Pennsylvania and Washington, the students with LD were distributed across the schools so that no one class had an overrepresentation of students with LD. Again, this was consistent with the decision to involve all teachers in the building, not just volunteers. As a result, more teachers had students with LD assigned to their classes, and the special education teacher had to distribute her time across a greater number of rooms. In Pennsylvania, for example, the special education teacher cotaught only 30 minutes per day, 4 days per week in classes to which students with LD had been assigned.

Assignment of students in Minnesota used a combination of these two approaches. At the primary level, students with IEPs were distributed to as many classrooms as possible; in this way, the special education teacher responsible for the alternative reading program could legitimately teach a reading group containing at least one student with an IEP and an additional eight or nine students

at risk for reading failure in most of the primary classes in the school. In the intermediate school, the students with LD were clustered for reading and mathematics instruction so that the special education teacher could be available to team teach during those instructional periods.

In two sites (Pennsylvania and Minnesota), students with LD attended their home school. In Washington, most of the students with LD attended their home school, but district policies regarding class size sometimes required that a student with LD be transferred to a different elementary school.

In Virginia, regionally organized special education services resulted in some students with LD attending schools other than their home schools at the elementary level. The result was a relatively large population of students with LD (5.7%) and enough students at each grade level to make a clustering model of student assignment work. In the school district in which the Kansas site was located, most students with LD were served in resource room or self-contained placements in their home school. But the Kansas Collaborative Teaching Model required a significant number of students (seven to eight) with IEPs at each grade level, and a school building of 315 students did not generate referrals to special education at that high level. As a result, the Kansas principal recruited transfer students to attend her building; she encouraged parents to send students with IEPs to her school in order to participate in the full-inclusion, Collaborative Teaching Model. School personnel were proud that students with LD were fully included and they seemed to forget that to accomplish this, some students were not attending their home schools.

*Designing Special Education Services for Students with LD.* Finally, the provision of services to students with LD differed among the models, with various combinations of consultation between general education and special education teachers, team teaching, assistance from peers and paraprofessionals, and reinvented special services provided outside of the classroom or beyond the school day. In all five models, students with LD had the opportunity to participate in the same lessons as nondisabled peers. In Kansas, all educational opportunities for students with IEPs were provided in the general education classroom and during the regular school day.

In three sites (VA, PA, and WA), however, students with LD could also attend special extended day activities (in WA, these opportunities were also made available to students without IEPs). These special activities ranged from one-to-one tutoring to group instruction in reading or math. In Minnesota and Washington, students with LD and other at-risk students could participate in alternative, pull-out instruction during the school day. In both settings, this instruction resembled traditional resource room instruction (e.g., basic skills instruction in reading), although in Washington, the instruction took place on the floor in the hall outside the classroom rather than in a separate special education room. In Washington, the pull-out activities (e.g., cross-age peer tutoring and small-group phonics lessons) were scheduled while other students engaged in enrichment activities. So many such lessons were scheduled that the special education teacher could not handle them all; the special education paraprofessional was, therefore, assigned some very challenging teaching responsibilities that required ongoing monitor-

ing and adjustment of instruction. The special education teacher described the demands:

It's a tough job. It's unfair to the instructional assistant, you're asking them to take on a lot of teaching and this isn't cut and paste, it's teaching and it's a very tough job. Another thing I learned is that it demands incredible professionalism because you are working with so many staff people. It's not a matter of simply trying to adjust to one person, it's the entire staff and that takes a truly talented and professional person to do it. (5/20/93)

In Minnesota, pull-aside alternative reading lessons were scheduled for all students who were having difficulty in reading, as long as one of the students in the pull-aside reading group had an IEP. Pull-aside lessons took place during regularly scheduled reading time but not during all reading lessons, so that students in the alternative reading program received instruction in the basal, developmental reading program, as well.

### *The Special Education Teacher: Jill-of-All-Trades*

In each of these five sites, the special education teacher who was involved in inclusion took on a new role. In addition to teaching students with LD, many of these teachers were now also responsible for teaching students who did not have IEPs, for consulting with teachers in general education, and for participating in teacher assistance teams. The scope of the role that each teacher assumed reflected both the model that had been selected and the ways in which the particular teacher had shaped the role to fit her talents and interests.

All of the teachers spent some time in general education classrooms. In Washington, the special education teacher had a flexible schedule and monitored students in all classes with brief, routine visits. In Pennsylvania, the special education teachers followed a preset schedule with short (30- to 40-minute) coteaching periods 4 days per week in each class. In the remaining sites (VA, MN, and KS), the special education teachers were scheduled to team teach with two to four teachers for longer blocks of time (1.5 to 4 hours per day). Each teacher believed that the way she was doing it stretched the limits of the possibilities, and none of the teachers believed there was enough time for coteaching and coplanning. As one special education teacher put it:

You want to be prepared when you walk into your collaborative class. Planning three mornings a week and then I would also staff with the speech and language pathologist. We have faculty meetings, child study. I think there is truly a point where you have diminishing returns and I think that was about as big as we could go . . . I don't think if you were in the room less than an hour that I would have nearly the impact. (VA, 5/11/93) [She was not aware that in PA, the teacher spending 30 minutes per day, 4 days per week in a general education class believed she did have a significant impact!]

*Providing Direct Services to Students with LD.* One responsibility of the special education teachers assigned to an inclusion class continued to be to teach students with IEPs. In all of the settings, these lessons were provided to groups of students consisting of both those with and without IEPs. In Pennsylvania, the special education teacher also provided some one-to-one instruction to students

with IEPs; in Virginia and Minnesota, this one-to-one instruction was provided by a second special education teacher who was physically located in a special education resource room. In all cases, whether it was group instruction of students with LD and nondisabled peers in the hall outside the second-grade classroom, or drilling on sight words in the back of the room on a Friday afternoon, or regularly scheduled sessions on phonics skills in a resource room, the direct instruction provided by the special education staff to students with LD preserved (or reinvented) some features of traditional special education services: emphasis on basic skills and lesson sequences unrelated to the ongoing instructional program (e.g., reading instruction that was unaligned).

Conspicuously absent, as we watched the special education teachers and talked with them about their roles, were activities focused on assessing individual students to monitor their progress through the curriculum. Concern for the individual was replaced by concern for a group—the smooth functioning of the mainstream class, the progress of the reading group, the organization and management of cooperative learning groups or peer tutoring. No one seemed concerned about individual achievement, individual progress, individual learning.

*Providing Instruction to Nondisabled Students.* During the scheduled coteaching sessions, special education and general education teachers engaged in a wide variety of coteaching activities. Sometimes, the two teachers team taught a whole-class lesson, with both teachers participating equally in the instructional activity. In this arrangement, teacher roles were not differentiated, and for the time that both teachers were present in the room, special and general educators were indistinguishable to an observer. This arrangement was most apparent in Kansas.

An alternative approach to coteaching involved one of the two teachers teaching a whole-class lesson while the second teacher circulated, monitored, and prompted individual students as needed; the two teachers might alternate the role of teacher and monitor. This model was seen mostly in Washington when the special education teacher “dropped in” on ongoing instruction to monitor the participation of the students with LD and help where she could. It was sometimes used in Virginia and Pennsylvania, although it was not the predominant operating mode in these sites.

More typically, in these two schools, the class was divided into two groups and each teacher taught one group. Sometimes each teacher was teaching the same lesson, but having two teachers allowed each to teach a smaller group. Other times, the two teachers taught the same objective, but they used different instructional strategies and/or materials; this was the most common arrangement for coteaching in Pennsylvania (e.g., both teachers taught a writing lesson but one gave students a theme and instructed them to write a paragraph, and the second provided sentences printed on strips of cardboard and asked the students to reorder the sentences into a story and copy it onto their paper). Or, the two teachers each taught a different lesson, but switched groups midway through the class period so that all students received both lessons; this appeared to be most common in Virginia.

In Minnesota, it was most typical for the special education teacher to provide a designated group of students with a remedial lesson while the general educa-

tion teacher taught the rest of the class an enrichment lesson. In this way, students were not out of synch within the ongoing curriculum but could still receive remedial instruction.

All the special education teachers were sensitive about the fact that they were "guests" in another teacher's class, and might be viewed by outsiders (or by their general education partner) as no more than an extra pair of hands, equivalent to a paraprofessional. One special education teacher said:

The special education teacher can either choose to, or the general education teacher can put him or her, in the position of being an aide . . . . When visitors come they always ask me if I'm the para . . . but it's like I've got my master's degree, by God, I'm not a para . . . [The solution is] planning time. If you do not have an appropriate amount of planning time, you will not have the flowing of the lessons, and one person will end up taking over. (KS, 5/4/93)

*Collaborating with Professionals.* Planning time was built into the schedule of special education teachers in Virginia, Pennsylvania, and Kansas, but it was done on-the-fly in Washington, and not done at all in Minnesota. The amount of scheduled planning time varied from 30 to 60 minutes per week for meetings to take place between the special education teacher and each of her partners. In Virginia and Kansas, dyads of teachers would meet during these designated planning periods. In Pennsylvania, planning time involved all adults who would be working with students at a particular grade level (i.e., the special education teacher, the Chapter 1 teacher, the gifted teacher, and the three second-grade teachers meeting together for 30 minutes of planning). Observations of two planning meetings highlighted the types of decisions that were required for coteaching to work smoothly. Mostly teachers talked about what would be taught and how it would be taught. The special education teacher made suggestions for ways to infuse learning strategies, graphic organizers, or a hands-on activity into a lesson that was outlined in the teacher's manual. She suggested alternative worksheets or assignments both for the lessons she might teach and for the ones to be taught by the mainstream teacher. In Pennsylvania and Virginia, where both teachers taught small groups at the same time, the discussion included decisions about who would teach what. In Kansas, where whole-class instruction prevailed and there was no differentiation of roles, coplanning discussions were limited to what would be taught.

In all three settings, however, planning occurred at the "activity" level (what reading assignment or worksheet would the group be given to do), not at the individual student level (what unique assignment will be developed for a particular child). When the special education teacher suggested an alternative assignment, or an adaptation to a proposed approach, it was at the level of LD stereotypes (e.g., "Students with LD are more likely to learn it if we use a graphic organizer") than at the level of meeting an individual student's needs (e.g., "Jason has difficulty remembering isolated facts so let's provide him with a weave on which to summarize the story"). Planning was also not data based. Teachers did not bring to the planning meeting assessment or monitoring data on individual students or any formal or informal evaluations of how successful a previous lesson had been with a particular student or groups of students. We did hear teachers saying, "This concept is hard, so let's try . . ." or, "This worked really well last year, let's do it again," but data were not part of these discussions.

### *Instruction for Students with LD: Are They Getting a Special Education?*

The students with LD whom we observed in these five schools participated in the educational experiences provided to all students. They were assigned to homerooms with their nondisabled peers. They covered the age-appropriate curriculum in reading, language arts, mathematics, science, and social studies. They participated in physical education, art, and music with their homeroom group. When holiday and special events occurred, they were included with their classmates. Even those who were pulled out or pulled aside were not isolated or segregated from normally developing, nondisabled peers. In this context of inclusion, we looked for evidence of accommodating individual differences, remediating deficit skills, and providing one-to-one instruction.

*Accommodating Individual Needs.* Students used modified materials, assignments, and evaluation tasks in all the sites. We learned that teachers had shortened assignments (e.g., weekly list of spelling words, number of problems on homework assignment in mathematics) for students with LD. They had provided opportunities for students to preview or rehearse next week's reading selections or the next chapter in a content area textbook. General education teachers seemed genuinely willing to make accommodations for the students with LD assigned to their classes, but they all had an underlying concern about the time this required. One fifth-grade teacher stated:

Basically [one student with LD] is the one that needs the most, as far as the highlighting and that kind of thing like that, as far as combinations on the tests and stuff, it would be nice if he had more time. What he needs is the constant one-on-one guidance, basically. I don't know if after a time that he would be able to be a little more independent or not. I really don't think so. The time management [for the teacher] is always going to be the difficult problem. It is really difficult to find the amount of time necessary to give to that person. That is the problem that I have and I think we are going to continually have that problem. (PA, 3/3/93)

Most accommodations consisted of changing an approach to instruction for the whole class, prompted by an attempt to meet the needs of students with LD. As the Virginia special education teacher put it, "Typically when we make modifications we make those modifications for the LD students, with them in mind, but for everyone at the same time . . . You know, [it] helps everyone" (5/10/93).

Adaptations that fell into this category included redesigned tests, more oral reading of textbooks during class time, allowing any student in the class to make use of a math matrix of multiplication or division facts, teaching the entire class some reading or composition strategies, or allowing choice and flexibility in the selection of part of the weekly spelling list.

We rarely saw adaptations directed at a single student. When we did, they consisted of more explicit instructions repeated, specifically, to a particular student. As one of the primary teachers in Virginia put it, "Day by day, talking her through it, reminding her of what needed to be done, and how to do it, and where it went" (5/10/93).

Some teachers were "philosophically" opposed to making any accommodations for the students with LD; these teachers, mostly working at the intermediate

grades, believed that the students needed to learn to cope with whatever the world handed them. These teachers were concerned about preparing their students for middle school or junior high school where, they thought, no one would make exceptions for students with LD. In these classes, students with LD completed all of the same assignments and tests as everyone else in the class; their work was not individualized or differentiated in any way, and their teachers announced this fact proudly!

*Remediating Deficit Skills.* Remediation in reading and mathematics was available to some students with LD during extended school day activities (before or after school) or in pull-out settings during the school day. In Washington and Minnesota, students had access to alternative instruction in reading during the school day. The special education teacher in Washington also organized remediation groups during lunchtime and before and after school for small groups of students (both labeled and not labeled) who were struggling with the academic curriculum. In Pennsylvania, individual tutoring was arranged with the special education teacher as time permitted. Private arrangements for individual tutoring before or after school were made with other teachers by parents in Virginia and Pennsylvania. In four sites, efforts were made to create opportunities for extra practice or reteaching without pulling students out of general education activities. In every site we heard teachers, parents, and administrators acknowledging that some students with LD needed more than the in-class coteaching being provided in their model of services to students with LD. The principal in Pennsylvania reported that he had "retained pull-out Chapter 1 services once a week, especially for students in Grades 3, 4, and 5. We need to do something for the 'severe' cases" (3/2/93).

*Involving Peers and Paraprofessionals to Provide One-to-One Instruction.* In each site, administrators and teachers recognized that students with LD needed more attention, more coaching, and more correction than was being provided by the two teachers during coteaching times, or by the single general educator teaching, however adaptively, on her or his own. To give students more, the schools mobilized peers or paraprofessionals. Peer-mediated strategies were utilized in all sites to accommodate the needs of students with LD and other students. Peer-mediated strategies served to increase the opportunities for individual student responding and provided coaching for students who could not manage classroom work on their own. Kansas paired a student with LD with a classmate who helped him or her along. The system reflected the impressions of both teachers and the principal that within the Collaborative Teaching Model, students' learning difficulties could not be addressed specifically by either the general education or the special education teacher assigned to a particular class. Instead, direct teaching and coaching was the responsibility of that student's "study buddy." One primary teacher from Kansas said,

In third grade I have some kids reading at first-grade level; however, we've put them on like *A Taste of Blackberries* and they keep up. We have them . . . working as study buddies. They [the study buddies] teach the vocabulary to the kids. They really are able to keep up with comprehension. (5/3/93)

In Washington, a cross-age peer tutoring program operated in the all-purpose room everyday; intermediate-grade students were partnered with primary-grade students to work on reading fluency and comprehension. In their own classes, teachers also implemented cooperative learning groups for grade-level instructional activities in reading. Teachers in Pennsylvania, Minnesota, and Virginia also used cooperative learning groups at the intermediate grades.

In several sites, the students with LD received their assistance, coaching, and direct instruction from paraprofessionals as well as from peers. Paraprofessionals took over significant direct service roles in Washington and more assistive roles in Pennsylvania. Their duties generally included monitoring of practice tasks or of oral reading, but they were often called on to teach a small-group lesson to a group of students who needed special assistance.

### IMPLICATIONS OF OUR FINDINGS FOR POLICY AND TEACHER PREPARATION

Based on our observations of 10 students with LD in six school buildings over 10 school days, as well as our conversations with school personnel, we believe that students with LD in these models of inclusive education were getting a very good *general* education. They were being taught enthusiastically, not grudgingly, by general education teachers. Special education teachers, in the roles of coordinator, coplanner, and coteacher, were making it possible for these general education teachers to feel comfortable about the educational tasks with which they were confronted, and for students with LD to feel comfortable about functioning in a general education setting. Accommodations that were made were generally implemented for the entire class, so that from the student's perspective, he or she was not singled out or made to feel different. Teachers, both general and special, were trying to teach everyone well, and in that way meet the needs of the special education students who were present. Whatever "special" instruction or coaching was needed by the student was generally provided by peers or paraprofessionals. And if a student needed more than that, special education pull-out services were "reinvented."

Prior to initiating their inclusion models, the professionals in our six schools, the general education teachers, the special education teachers, and the administrators, had all recognized the need to improve services for students with LD. They had listened to the call for restructuring special education and had responded, each school in its own way. The professionals had organized a program of special education services in which students with LD participated in the educational program offered to all students. They had placed students with LD in age-appropriate curricula and fostered their participation in all of the activities of the general education classroom. They had even found ways to provide what they considered to be *special* opportunities by extending the school day, or engaging peers, aides, and volunteers, or making minor modifications in assignments. In most cases, they deliberately avoided singling our students with LD by making these special opportunities available to all students who might need them in these sites.

The educational experiences described in these case studies raise a number of questions that have implications for policy decisions and personnel preparation. The following sections address implications in these two areas.

### *Implications for Policy*

1. *What is inclusion?* It was clear from our travels across the country, our conversations with school personnel, and our observations in these five sites that inclusion had different meanings for different people. The common thread among these five sites was a view of inclusion as “place”—a seat in an age-appropriate general education classroom to have access to, and participate fully in, the general education instructional program. But it also meant bringing the special education teacher or the special education paraprofessional into that place to help make this inclusion work. Beyond this broad conceptualization, there was little common ground across the sites, and this illustrates how fundamentally “inclusion” means different things in different schools and among different professionals. A national policy of inclusion will be no more than rhetoric until more common understandings are reached.

2. *Is inclusion a personal philosophy or a schoolwide obligation?* In three of our five sites (VA, KS, MN), the inclusion of students with LD into general education classes depended on finding volunteer teachers who were willing to try it. According to one special education teacher:

You have to have people that believe the philosophy. If you don't really and truly believe that those kids can learn, they shouldn't be in your classroom and you shouldn't make a teacher take them into her classroom . . . . A couple of [other schools] who tried it . . . I think they made mistakes . . . so they haven't worked as well . . . trying to make people do it who didn't want to. (KS, 5/3/93)

We do not question the need for those involved in educating our children to believe that the students assigned to them are appropriately placed and worthy of investment of time and energy, but it is difficult to imagine how a *policy* of inclusion can be based on volunteerism. There is not likely to be a shift in the general climate of a school if students with disabilities are placed only into the classrooms of willing teachers. Indeed, in the schools we visited, there was no evidence that the “experiment” tried with a small group of volunteer teachers had “caught on” and was adopted by the school in general. On the contrary, in each of these schools, there was some tension in the spring of the year about whether the volunteers would be willing to shoulder the inclusion burden again the following school year, or whether a new model of services would have to be developed if no teachers volunteered.

3. *Is inclusion an alternative to pull-out or the next rung up the continuum of services for students who are ready for it?* In some sites, specifically in Pennsylvania, Kansas, and Washington, the inclusion model supplanted the pull-out services, at least initially. Students were reintegrated full time into general education classrooms, ready or not! Everyone went back, then in Pennsylvania and Washington, new pull-out or pull-aside services were introduced for any students in the school who needed them. Staffing these new pull-out services was difficult, however, because special education teaching resources had generally been used up in supporting

the in-class programs. For example, of the 19 students with LD served in the Pennsylvania site, the principal estimated that 6 needed additional services. He expressed a need for a second teacher to handle the pull-out services, but reported:

Superintendents look at the figures over the district . . . and these people don't know much about adapting, inclusion . . . you would certainly have another teacher, from one standpoint, but you also know that's not possible. So what I've done in next year's budget is ask for 4 more hours of classroom aide. I know full well I'm not going to get any more teacher help. That's [classroom aides] a simple, cheap little thing . . . they can just have the kids read to them, do CBA's, highlight stuff on tests. A lot of adaptations they can do. (3/3/93)

In the remaining sites, in-class special education services were available for those students whose progress in academic skills and social development warranted less time in pull-out and more time in the general education setting. These reintegrated students were "ready" for instruction in the mainstream, although many of them continued to have some supplemental services provided in a resource room setting from personnel not involved in the in-class efforts. Maintaining two complete sets of services (pull-out and in-class) severely constrained the inclusion program. In Minnesota, only a half-time teacher was available for in-class alternative reading instruction, and she put herself on a 6-day rotation schedule to get 3 days per week in each classroom. In Virginia, with only one full-time-equivalent special education teacher, only three classrooms could be involved in the inclusion model.

The result was that in both situations, instructional aides or paraprofessionals, where available, assumed a significant level of responsibility in teaching, monitoring, and adapting instruction for students with LD; the responsibility for accommodating individual needs often fell to a "study buddy" classmate. Although peers and paraprofessionals can offer increased opportunities for responding and for feedback, we have two concerns about their utilization in the five sites. One centers on the lack of training provided for the paraprofessionals and peers who worked with the students with LD. In four of the sites (the exception was WA), there was no clear plan for preparing individuals other than the teacher to provide instruction. Our second concern is that the assistance provided to students with LD was informal. In most cases, the peer or paraprofessional helped the student in response to an immediate need; preplanning was not evident in their use of materials or instructional tasks. Specific assignments had not been developed by the teacher for use by the para or peer to facilitate an increase in academic engagement or academic success.

4. *Is inclusion more economical?* The finances of inclusion were complex in each site we visited, but throughout our travels, it was clear that implementing inclusive programs required more, not fewer, resources than were being spent on pull-out programs. In-class services stretched special education personnel very thin—acutely so when students were distributed rather than clustered. To economize, schools used peers, paras, and parents in instructional roles, the *least well trained* individuals to teach the *most difficult to teach!* And, despite their commitments to "services without labels," most schools felt the need to continue to identify students as eligible for LD special education placements in order to

justify the continued assignment of special education personnel to the building. In Kansas, this need to maintain an appropriate ratio between labeled students and special education teachers resulted in the principal actively "importing" students from neighboring schools.

5. *What is special education?* We saw very little "specially designed instruction" delivered uniquely to a student with LD. We saw almost no specific, directed, individualized, intensive, remedial instruction of students who were clearly deficient academically and struggling with the schoolwork they were being given. We heard no philosophizing about what special education was or should be, only pragmatic talk about helping all students manage the general education curriculum and providing extra help to anyone who needed it. If special education once meant a unique curriculum for a child with a disability, careful monitoring of student progress, instruction based on assessment data, or advocacy for an individual student's unique needs, it no longer held those meanings in these schools.

### *Implications for Personnel Preparation*

1. *What skills will special educators need in inclusion models?* Professionals in these five sites took on nontraditional roles. Special education teachers provided large-group instruction for general education students. General education teachers taught learning strategies (which they had learned from the special education teacher) to classroom groups that included students with LD. Special education and general education teachers planned collaboratively to meet the needs of all students assigned to general education classrooms. The special educators in these models were required to assess group needs, plan instruction for the whole class, conduct whole-class instruction, monitor group and individual progress, and tailor instruction for the group. These roles require skills in group-oriented assessment and instruction. Additionally, special education teachers were accountable for monitoring IEPs of individual students and consulting with other professionals. As teachers are prepared for roles in inclusion, the skills they learn will need to combine group and individual orientations, as well as address student and professional interactions.

2. *Can special educators be prepared at the preservice level to fill the roles required of them in an inclusion model?* At all the sites, the special education teachers involved in the redesigned special education programs were experienced veterans of pull-out service delivery models who had had inservice training for new roles and responsibilities. Their effectiveness derived from both their experience as special education teachers and their new training for inclusion. There was no question in any of the sites that inservice training had been essential to a successful implementation. As one teacher put it, "In some schools, where the model was not successful, they didn't allow them planning time and the training time. You have to have the planning time and the training time" (VA, 5/10/93).

The demands of the new roles in inclusion models raise questions about the potential of novice special education teachers to perform the roles of coteacher, coplanner, and consultant. An alternative approach would be to continue to prepare teachers at the preservice level to focus on providing diagnostic and remedial strategies, monitoring progress, and adjusting instruction for individ-

uals and small groups. That training would provide a good foundation on which to build a collaboration with general education and would ensure that the special educator brought a unique perspective to the collaboration. Ongoing inservice training and advanced graduate preparation could focus on coteaching and consultation skills as a specialty area for the already-certified special education teacher.

3. *In the future, will there be a need for teachers trained as special educators?* In inclusion models, professionals coteach in general education classrooms, and in the five sites we observed, these professional coteaching configurations varied from site to site. In Kansas, for example, there was no differentiation of roles when special and general education teachers cotaught. When asked about the unique contribution made by the special education teacher to the collaborations, the response related primarily to training in and knowledge of learning strategies. If general education teachers received adequate preservice preparation in "learning strategies," would there be a need for a special education teacher in the coteaching role?

It is difficult to imagine that the unique skills of the special education teachers were not critical to the success of the inclusion models we observed, but if all of special education will, in the future, be delivered within the general education classroom and through modifications of the general education curriculum, it is certainly conceivable that the need for specially trained teachers will diminish and that school districts will seek to employ less expensive and less well educated individuals to assist in the general education class.

## CONCLUSION

In these five sites, special education services provided in general education classrooms varied on some dimensions of the roles for special educators and the educational experiences for students with LD. However, in all five sites, changes from traditional pull-out models had clear implications for educational policy and personnel preparation. In the articles that follow, colleagues from across the country provide their reactions to our work, based on their own perspectives on inclusion. The seven reaction papers are published in alphabetical order by first author: Michael M. Gerber, Edwin W. Martin, Joseph Murphy, Margaret J. McLaughlin, Marleen C. Pugach, Thomas E. Scruggs and Margo A. Mastropieri, and Paul T. Sindelar. In the final article of this special issue, we summarize the themes that emerge from these reaction papers and our own conclusions on special education for students with LD in inclusion models.

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