

FOCUS ON EXCEPTIONAL CHILDREN

IMPLEMENTATION OF IEPs: New Teacher Roles and Requisite Support Systems

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and Linda Lewis*

The Education for All Handicapped Children Act of 1975 represents a unique and innovative piece of legislation in that it addresses not only administrative and fiscal concerns, but also deals directly with instructional programming. Through its provisions that every handicapped child must have an Individualized Education Program (IEP), the law essentially legislates an individualized, child-centered approach to educating handicapped children.

Certainly, the concept of child-centered, individualized programming for children is not new to special education. If special education instructional literature of the past decade has had a focus, this has been it (Johnson, 1967; Reger, Schroeder & Uschold, 1968; Hammill, 1971; Cartwright, Cartwright, & Ysseldyke, 1973; Herrick, 1972; Minskoff, 1973). A predominant concern is special education has been to avoid dealing with children in terms of labels, focusing instead on each child's unique qualities, carefully determining his or her educationally relevant strengths and weaknesses, and devising an appropriate educational program for the child based on those strengths and weaknesses. In special education, this generally has been referred to as the *diagnostic/prescriptive approach* to teaching. Because the IEP component of PL 94-142 requires the child's current level of functioning to be determined and used as a basis for establishing goals and objectives, it represents a formalization of the diagnostic/prescriptive approach to education.

Since the IEP provisions of PL 94-142 are basically consistent with a predominant trend in special education, implementation of the law would seem to be almost a routine matter for special education teachers and administrators. Passage of the law, however, was greeted with confusion, speculation, and consternation in many instances—much of this centering on the IEP. One likely reason for this reaction was suggested by Gotts (1976): Widespread adoption of the diagnostic/prescriptive approach has never occurred at the classroom level. Despite extensive literature, heavily promoted curriculum materials, and reoriented teacher training programs, individualized educational programming in many instances remains a concept rather than an operational reality.

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Thus, actual implementation of individualized educational programming necessitates major changes in the provision of instructional programs and services to handicapped children. Furthermore, since the special education teacher has been identified as the person most appropriately involved in prescriptive aspects of the individualized educational planning process (Fenton, Yoshida, Maxwell, & Kaufman, 1977), implementation of individualized educational programming can be expected to particularly change the role or job requirements of the special education teacher.

IEP PROVISIONS OF PL 94-142 AND THEIR IMPLICATIONS

PL 94-142 requires that every child receiving special education services must have an IEP developed in a meeting attended by a representative of the local educational agency, the child's teacher(s), parents of the child, and, when appropriate, the child. The individualized education program plan is to contain statements of the child's current level of performance, annual goals and short-term objectives, the specific special education services to be provided to the child, the extent to which the child will be able to participate in regular education programs, the expected dates for initiation of services and projected duration of services, and the objective criteria by which progress toward the short-term objectives will be measured, as well as a schedule for reviewing (at least on an annual basis) the IEP.

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The spirit of PL 94-142, then, is one of assuring that handicapped children receive special instructional services which are planned and implemented in keeping with their individual needs. This intent is in keeping with the concepts of diagnostic/prescriptive teaching — assessment of educational needs and determination and implementation of a program on the basis of those needs. Though unintentional, the language of the law can be interpreted as extending these basic tenets of diagnostic/prescriptive teaching somewhat in the direction of *precision teaching* (Kunzelmann, 1970; Haring, 1971; Gentry & Haring, 1976), or *data-based instruction* (Hall, 1975; Lilly, 1977). It does this by specifying that short-term objectives will be written, accompanied by objective criteria by which progress in meeting the short-term objectives will be measured. The terms *short-term objectives*, *objective criteria*, and *progress measured* all are reminiscent of these more behavioral, accountability-oriented teaching approaches.

From the provisions of the law, several types of changes seem necessary if individualized education is to be implemented. First, planning or developing individualized education programs requires that certain tasks be carried out. These tasks include administering educational assessments, meeting and working with parents, developing annual goals and short-term objectives for individual children, and measuring and keeping careful records to substantiate progress toward attaining annual goals and short-term objectives.

Second, implementation of individualized education programs may require a reorientation of the classroom because each child will be working on different goals and objectives. In many instances, large group instruction will be replaced by more individualized activities. Work centers may be established and freshly equipped each day with self-instructional materials and worksheets appropriate for each child. Aides, volunteers, and student tutors may have to be drawn into the classroom and their activities coordinated and supervised.

Finally, the authority and responsibility for decisions related to instructional programming will be shared by special education teachers, regular education teachers, parents, principals, support personnel, and in some instances, handicapped students. At the same time, greater accountability is implied in assuring that each student's instructional program is in accordance with the IEP document generated by the group.

Changes such as these will be far-reaching in scope and will have particular impact on the special education teacher. To some extent, the nature of the role of special education teacher will change from one of being primarily a provider of instruction to one of being more like an instructional manager. Thus, special education teachers in particular have expressed apprehensions concern-

ing the implementation of individualized educational programming for handicapped children.

A Framework for Looking at Changes

The work of Dan Lortie (1975) provides a framework for looking at these apprehensions which suggests that changes in teacher role are more than just interesting sociological phenomena—they can have very real consequences in terms of job satisfaction and teacher morale. In his book *School Teacher* (1975), Lortie lists three types of rewards a career can offer: (1) extrinsic rewards such as income, prestige, and power; (2) ancillary rewards such as security, hours, or cleanliness; and (3) psychic or intrinsic rewards. The structure of teaching, he suggests, emphasizes psychic rewards. According to Lortie, teachers report “reaching a group of students,” or “the joy of teaching” as their major source of satisfaction in the profession. Teaching is viewed from a service orientation, and as such is rewarded by the culture which extols the “dedicated teacher.” Because the primary rewards in teaching are psychic, Lortie says, teachers value and assign priority to aspects of the job in which such rewards are likely to occur—activities in which they either are working directly with students or performing closely related tasks such as lesson preparation or counseling. Teachers also devalue and resent noninstructional activities such as clerical duties or duties outside the classroom; they perceive such activities as detracting from their potentially productive time instructing students.

Lortie also refers to the cellular nature of schools with their multiple self-contained classrooms and low task interdependence among teachers. Throughout the history of schooling in this nation, he points out, teachers have worked relatively independently, assuming specific areas of responsibility without assistance from others. Thus, traditionally, teachers have enjoyed primary responsibility for and control of activities in their classrooms. Related to this independence is the feeling among teachers, as reported from a survey by Lortie, that teaching effectiveness can best be judged by the teacher from observations and interaction with students. Though many teachers expressed occasional difficulties in assessing teaching effectiveness, they did not believe that outside agents or even tests could assess the effectiveness of teaching as well as the teacher herself or himself.

Lortie's work suggests that because the primary rewards of teaching are derived from tasks associated with the role, rather than from extrinsic sources such as salary level, changes in the teaching role must be considered in terms of their effect on job satisfaction and feelings of personal fulfillment among teachers. Changes perceived negatively by teachers might result in lowered morale,

dissatisfaction, and ultimately, in a rapid turnover rate among teachers. The information presented by Lortie suggests that several types of role changes might be perceived particularly negatively by teachers. Three of these will be given particular emphasis later in this chapter: (1) less time for direct instruction of children because of increased noninstructional tasks; (2) shared responsibility for classroom activities; and (3) increased accountability to outsiders. The instructional programming changes necessitated by implementation of individualized education seem likely to result in all of these role changes for special education teachers. Thus, there is a need to identify and clarify some of the potential major changes in the role and job requirements of the special education teacher.

Project IEP

The federally funded Project IEP was designed to identify and clarify perceptions related to roles in the IEP process. An open-ended interview procedure was used in 31 school districts in four states—Alabama, New Jersey, Washington, and Wisconsin. Teachers from two cohorts of districts were identified and interviewed. The first cohort of districts was selected on the basis of three criteria: (1) the degree to which an individualized educational programming process similar to that required by PL 94-142 was already required by the state; (2) national geographic representativeness; and (3) willingness to participate in the study. Similar criteria were used in selecting districts within states. In addition, efforts were made to maintain representative urban/suburban/rural and socioeconomic distributions within a state.

The project called for open-ended interviews with representatives of various groups affected by the individualized education process, such as administrators, regular and special education teachers, personnel from institutions, support personnel, parents, and advocacy groups. Initial interviewing took place in three cycles, with many respondents being interviewed more than once so information could be gathered on points that had come to light during previous interviews. Although a consistent set of general questions was used with all respondents, the format of each interview varied. Further, because the intent was to elicit as much in-depth information as possible on topics with which the respondents were most familiar or which were most important to them, varying amounts of information were obtained from respondents on different topics.

The processes used by the four states varied in their similarity to the IEP process required by PL 94-142. In two of the states, a system similar to requirements of PL 94-142 was utilized. In one of these states, however, a

statement of short-term objectives was required, although parents did not necessarily participate in its development. In the other state, a statement of objectives was suggested but not required, parents and teachers were not necessarily involved in the IEP meeting, and there was some variance in review schedules. In a third state, a multidisciplinary team approach to diagnosis and placement was used, and a statement of long-range goals for the special education career of the child was one product of this process. No statement of annual goals and short-term objectives was required by this state, and parents and teachers were not necessarily included in team meetings. In the fourth state, placement decisions were made by a committee, but no provisions were made for anything resembling an IEP process. Within all four states, as much or more variation was found among the districts within a particular state as between states. Thus, even the states with requirements similar to those mandated by PL 94-142 had districts in which there was essentially no effective IEP process at the state level, some districts had implemented many elements of the mandated IEP process at the district level.

From the first cohort, 133 special education teachers were interviewed. Of these teachers, 94 taught at the elementary level, and 39 taught at the secondary level; 51 of the teachers were resource teachers, and 82 were teachers of self-contained classes. With only a few exceptions, these teachers taught children with some type of cognitive impairment (retardation or learning disability) or emotional impairment. *Throughout this article, this sample of teachers will be referred to as the first group of teachers.*

Special education teachers interviewed in the four states expressed apprehensions and concerns about changes in their roles resulting from implementation of individualized educational programming or from additional requirements posed by PL 94-142. Further, although teachers in some districts in each of the states seemed comfortable with the role changes, their lack of apprehension was not related necessarily to the degree of implementation of a similar process at a district or state level.

To discover the factors that related to lack of teacher apprehension, a second cohort of school districts was selected. The second cohort was much smaller, consisting of four districts in the state of Washington. One of the four districts also was included in the first cohort of school districts. Fifteen special education teachers from the second cohort were interviewed. One third of these teachers taught at the secondary level, and slightly more than half were resource teachers. These teachers primarily taught cognitively or emotionally impaired children. *Hereafter, these teachers will be referred to as the second group of teachers.* In addition, directors of special

education and support personnel in each of these districts were interviewed to provide further information.

Since the purpose of the second cohort was to obtain an initial impression of conditions, policies, and practices that result in high teacher morale and job satisfaction, school districts were selected for: (1) practices similar to those required by PL 94-142 that had been in effect for a year or more; and (2) indications that teachers were relatively comfortable with those practices. For the most part, the four districts served middle class children. Three of the districts were located in suburban settings, and the fourth encompassed both a small city and rural population.

The first and second groups of districts may have differed in systematic ways. For example, the background and training of teachers, district resources, the composition of groups interviewed—or even information collection procedures—may have differed. Thus, no direct comparisons between the groups should be made. Nevertheless, although direct comparison of factors affecting the two groups is prohibited by the study's methodology, the teachers' and other interviewees' ideas and concerns about the new requirements are rich in useful information. Also, though it was believed that use of an open-ended, less structured interview technique would produce more in-depth, accurate information, this technique also makes the reporting of findings in terms of percentage of respondents virtually impossible. Thus, statements referring to teachers may be interpreted here as referring to a majority of teachers in the designated group unless otherwise indicated. Comments of particular teachers or district directors of special education also are included to exemplify or further explore certain points.

CHANGES IN THE SPECIAL EDUCATION TEACHER'S ROLE AND JOB REQUIREMENTS

Interviews in the four states confirmed that special education teachers expected the implementation of individualized educational programming to affect their role as teachers substantially and alter some of the requirements of their job. Teachers were apprehensive about changes in their role, although many were enthusiastic about the potential effects of individualized education for their students. Many of the perceptions and concerns expressed by teachers centered on the three critical role changes suggested by Lortie's work (see pg. 3). This section considers teacher perceptions and reactions related to each of these three areas of role change, as well as two other anticipated changes—demands on personal

time and new skill requirements—suggested by the teachers themselves.

Less Time for Direct Instruction of Children

In all four states, the first group of special education teachers expressed concerns that the IEP component of PL 94-142 would result in less teacher time being devoted to direct instruction of children. By direct instruction, these teachers seemed to refer to a teacher/pupil interaction in which the goal is the pupils' acquisition of some skill or concept. The first group was virtually unanimous in the belief that a decrease in teacher contact time would be harmful for students' learning. In addition, teachers predicted that their jobs would be less satisfying with a decrease in instructional activities. Teachers reported that they selected their careers to teach children, not to keep records and arrange meetings.

Two elements of providing individualized educational programming appeared to teachers to be most likely to result in less time for direct instruction of children. The first stems from the additional noninstructional planning tasks and the second from the anticipated reorientation of special education classrooms to provide for implementation of individualized education programs.

Additional Noninstructional Planning Tasks

The first group of teachers feared that requirements of the IEP component of PL 94-142 would necessitate spending a greater proportion of their time and effort in activities that would be noninstructional in nature. Teachers cited their increased involvement in administering informal educational assessments, writing annual goals and short-term objectives, notifying parents of program changes and obtaining their consent, attending IEP meetings, and keeping records of pupil progress, as examples of time consuming, noninstructional clerical tasks they would have to perform. Teachers clearly saw these as "add on" tasks to their original job descriptions, and essentially saw no alternative to cutting instructional time in order to carry them out. In two states, teachers recounted their experiences following implementation of state legislation with certain documentation requirements similar to those of PL 94-142. For example, one communication disorders specialist stated that because of the state legislation, she has had to cut the services provided to children in order to participate in program development activities. A resource room teacher reported that when faced with the pressure to document his work with children, he often has to choose between working with a child and record keeping.

Clearly, the component steps of the IEP process—assessing current performance, writing objectives, and evaluating and recording progress—were not viewed as elements of instructional planning by many of the teachers in this study. This is somewhat surprising since Lortie (1975) found that teachers included similar activities related to lesson planning within the domain of "potentially productive time." This category included instruction and activities closely related to it, and was distinct from "inert time" such as that spent in clerical tasks.

According to Shavelson (1976), instructional planning or lesson planning can be seen to include four elements: (1) specifying the outcomes that are to result from instruction in terms of observable student behaviors; (2) determining the student's present educational level; (3) designing an instructional sequence to move the student from her or his present level toward the outcome; and (4) determining a means of evaluating the outcomes. These elements seem virtually identical to the statement of annual goals, statement of present level of functioning, statement of short-term objectives, and statement of objective criteria by which progress will be measured as required by PL 94-142 in each IEP document.

It would appear, then, that the information contained in the IEP documents should feed directly into the information required for lesson planning, whether that planning is for groups or for individuals. That is, in individualized lesson planning, the outcomes specified for the lesson could be the same as or a derivative of a short-term objective from the IEP document for the child. The present educational level of the learner could be determined from the statement of present level of functioning in an IEP document, updated by any records of progress in meeting that objective. For a group lesson, the outcomes specified for the lesson could still correspond to some aggregate of short-term objectives from the plans of the children to be taught. Thus, although the individualized education program plan for a handicapped child maps out an annual program for a child, there would seem to be some potential that the information contained in that plan could guide teachers as they go about their daily lesson planning.

Many teachers in the first group did not, however, share this perspective. Though these teachers reported spending a good deal of time planning lessons and preparing materials, they did not see the information required in the IEP plan as a part of or even particularly useful to that process. Basically, a number of teachers stated that their lesson plans came from their instincts about the group. They reported that after a few weeks with a child they "knew that child" as a function of teaching her or him—and that knowledge or gestalt guided their planning.

Teachers in the second group, on the other hand, spoke strongly of the key role the individualized educational programming process played in their instructional planning. They reported that the process required them to think about and analyze their teaching. Carrying out assessments, they stated, focused their attention on the student, while writing goals and objectives structured their thinking about where they were going during the year and what they wanted to accomplish. These teachers stated that the individualized educational programming process actually saved them time during the year in planning lessons. The program plan, they said, provided the goals of instruction as well as the means of evaluation, so that it was necessary only to plan the "how"—the activities or materials that would foster the particular goal. Thus, lesson planning became almost automatic.

The teachers in these districts also believed that the IEP document served to keep them on target during the year. Several teachers stated that as the year progressed, it was easy to lose sight of the goals of instruction and to get caught up in activities. Having written goal statements helped prevent this. They also found the daily or weekly records of progress extremely helpful. One teacher stated that without regular record keeping, several days might pass before the teacher was aware that children were bogged down. Other teachers said that instincts can be misleading and cited instances in which the teacher "felt" a lesson or a sequence of lessons had been on target and gone very well only to find out later that the students hadn't learned the skills and concepts presented.

These teachers also found systematic record keeping useful in motivating pupils. They reported that if an objective was written in measurable terms and shared with the student, pupils enjoyed evaluating their daily or weekly progress toward that objective, and would strive to improve their performance. Several of the teachers mentioned that although regular data collection or record keeping was important, it was sometimes a problem finding time to review the data and determine its implications for pupil programming. One teacher suggested that specific objectives and daily records be kept in only one or two subject areas, such as reading and math.

When asked how their teaching would change if no federal, state, or local requirements mandated individual assessment, stated objectives, and records of progress, virtually all of the teachers in the second group of districts reported that it would change very little. Referring to the IEP process, one teacher said, "I can't overstate how useful it is."

Clearly then, special education teachers in the second group found the IEP process an integral part of their teaching. The teachers interviewed, however, came primarily from university training programs which empha-

sized data-based instruction along with a diagnostic/prescriptive approach. Similarly, all of these teachers were teaching in school districts oriented to some degree to a prescriptive, data-based approach. The IEP process mandated by PL 94-142 seems to be highly compatible with such an approach, in many instances modifying only slightly the ongoing procedures already positively viewed by the teaching staff.

Data-based instruction and precision teaching, with their emphasis on assessment, task analysis, specific measurable objectives, and continual record keeping, stem from a particular approach to learning: *behaviorism*. Although behavioral approaches to teaching have received much attention in special education in recent years, other viable approaches to education exist. We do not know, for example, whether a teacher with a Piagetian approach to education, who might be more concerned with creating learning environments that would help a child move from one cognitive stage to another, would find the IEP process as compatible or ultimately as useful as did the teachers in the second group. Thus, some of the teachers in the original survey who were pessimistic about the usefulness of the IEP may have felt that way because they adhered to a nonbehavioral educational philosophy.

The degree to which teachers' actual lesson planning approximates Shavelson's (1976) ideal sequence is also unclear. Some work by Morine (1976) suggests that in writing lesson plans, teachers tend to state non-behavioral goals and fail to state the present level of the students or the procedures to be used in evaluating the lesson. These, of course, are the elements of instructional planning for which the IEP process seems to have the most potential relevance. Thus, if teachers are not including these elements in their lesson planning, one should not be surprised that they do not perceive the IEP as facilitating their task. (Morine does point out, however, that the fact that teachers don't address the level of the students or evaluation procedures in their written plan doesn't necessarily mean they don't consider these issues mentally.)

The second group of teachers expressed some hope that the IEP requirement would force more teachers to do the type of planning and record keeping that these teachers believed was necessary for effective instruction. To date, no research has been conducted which validates the superiority of a diagnostic/prescriptive, data-based approach or the effects of instructional planning on teaching performance (Morine, 1976). Despite these cautions, findings from the second group of districts suggest that once an efficient IEP process is underway, it will prove to be instructionally relevant to at least those special education teachers who favor a diagnostic/prescriptive, precision approach.

Reorientation of Special Education Classrooms

A second factor seen as affecting the time teachers spend in working directly with students is an anticipated reorientation of special education classrooms to provide for the implementation of individualized education programs. Although individual instruction is not required by PL 94-142, many of the first group teachers assumed that a great deal of individualization would be necessary to provide appropriate educational activities for children having various goals and objectives. Individualization frequently means establishing work stations where individual pupils or small groups of pupils can work on appropriate self-instructional materials. Teacher time then must be expended in supervising—circulating among work centers to make sure students are on task, checking pupil progress, recording pupil progress, and locating materials for the next day's objectives.

Individualization also frequently brings aides, volunteers, or student tutors into the classroom to work with individual students or small groups. Teacher time, then, also must be spent directing the activities of these other persons—assigning and explaining tasks to them, supervising tasks, and coordinating their schedules. Although the addition of other persons to the class may increase the interaction individual students have with adults, teachers generally are convinced that these supporting persons cannot provide the same quality of instruction as a trained teacher. Thus, from the teachers' perspective, an amount of their potential instructional time is taken up supervising persons who cannot provide the same high quality of instruction.

Interviews in the second group of districts confirmed both an expanded job description for teachers and a trend toward individualized instruction within the classroom. These teachers reported performing regular informal assessments, writing goals and objectives, conferring with parents, and keeping records of progress toward goals and objectives. The teachers also reported a high level of individualization in their classrooms, at least for the basic skill subjects of reading, math, and spelling. All of the teachers interviewed in the second group had established at least a few work centers and used tape recorders, individual folders, or clipboards to inform students of their day's activities. Work centers were predominant in resource classes, but even teachers in self-contained classes reported establishing some work centers and spending part of the day (generally the part of the day devoted to basic academic skills) using an individualized instructional format. Students moved through the centers working on their assigned activities, generally worksheets or a set of exercises in a programmed text. Upon completing an assignment, students were checked for

progress by the teacher, an aide, or sometimes checked themselves, then moved on to the next center.

Most of the teachers interviewed in the second group of districts reported spending considerable amounts of time checking and recording pupil progress, supervising students at their work centers to make sure they were on task, writing new short-term objectives, and locating or developing appropriate materials for accomplishing individual objectives. Several teachers reported using their aides to keep records, check progress, and help locate materials. Almost all teachers interviewed in the second group had aides and/or volunteers at least part of the day. Though teachers were grateful for the additional support, they also spoke of their feelings of frustration at having to take time "from the children" to explain assignments or procedures to the aides or volunteers.

Thus, reorientation of the classroom is confirmed somewhat by the second group of teachers. Clearly, each pupil spends less time in direct interaction with the teacher. Not only must teaching time be divided among the number of pupils or groups in the class, but a very real factor seems to be that teachers do have to engage in programming, record keeping, and supervisory activities that were not formerly a part of their role. Several of these teachers, particularly at the secondary level, appeared to be spending almost all of their time in such activities, with virtually no time remaining for instructing students directly.

The benefit or harm of such circumstances for students seems to depend in part on whether the education provided by carefully selected self-instructional materials such as programmed texts or worksheets is equal in quality to the education received through more direct, intense teacher interactions. A director of special education in the second group of districts indirectly addressed this issue. In reporting his district's experiences over a period of several years, he spoke of a tendency, when initially instituting an individualized prescriptive system, to overrely on self-instructional materials and work centers to the detriment of educational quality. This tendency stems, in his opinion, from the noninstructional demands placed on teachers which, without appropriate support from the district, can be awesome. Although this district initially had experienced this situation, teachers estimate that they now spend 50 minutes of every hour directly teaching children—attributed both to the emphasis that the district placed on direct instruction and to the administrative support provided to teachers.

Although many teachers in the second group of districts were spending a great deal of time assessing students, planning programs, keeping records, or supervising instead of directly instructing, none of the teachers expressed dissatisfaction with these aspects of the job. Furthermore, they gave no indication that they thought

their students were receiving less than quality educational experiences. All of the teachers interviewed, however, had received their special education training in institutions stressing a diagnostic/prescriptive, precision approach to special education. This then may account for their satisfaction with their current classroom role.

The directors of special education interviewed stated that as state and district policies had moved toward greater accountability and a diagnostic/prescriptive approach, some special education teachers had left the system. Presumably, these teachers were less satisfied with certain aspects of their changing role. Thus, some caution must be used in generalizing the positive attitude of teachers interviewed in the second group of districts to other teachers.

Shared Responsibility for Classroom Activities

In each of the four states, special education teachers expressed concern that they would lose some amount of control in the pupil planning process as a result of the specification in PL 94-142 that a child's educational program plan be developed at a meeting attended by the parent and an LEA representative. Teachers in this first group viewed the inclusion of others in program development as meaning that classroom planning which previously had been handled primarily by the teacher would now be a shared responsibility. As one district director of special education noted, bringing others into the planning process to discuss and plan for classroom instruction makes many teachers feel that what they have been doing has not been adequate. In addition, many of these teachers resented the fact that persons not responsible for classroom instruction would now have a role in planning for it. Some predicted that parents might insist on setting objectives inappropriate for a child or that a psychologist, unfamiliar with classroom instruction, might recommend objectives in line with results of an assessment but beyond the scope of the classroom setting. The teacher then would be obligated to teach unrealistic objectives.

Most teachers in this first group stressed that the teacher, trained to instruct and knowledgeable about the functioning of the child in the classroom, is best able to determine objectives and select instructional materials and strategies. Though not denying the value of input from parents or other professionals, teachers clearly believed they should have the ultimate say in determining an educational program. Teachers viewed PL 94-142 as potentially reducing their autonomy in determining educational programs and classroom activities by mandating the participation of other persons in the planning process.

In contrast, teachers in the second group of districts reported that sharing responsibility in the pupil planning

process has not resulted in a loss of control over either the development of educational plans or the provision of classroom instruction. They reported that they still exercise primary control over the goals and short-term objectives they will teach to in the classroom. The one change they mentioned was simplifying their language to better communicate the nature of the objectives to parents. They reported, however, that parents generally viewed the parental role in planning as providing input and approving the educational program plan. None of these teachers reported that parents used their expanded role in program development to make unreasonable demands. As pointed out by parents and some school personnel in the initial interviews, most parents consider the teacher and other school personnel, because of their training, best prepared to determine the specifics of the child's program.

In one of the districts, the problem of other school personnel contributing unreasonable goals and objectives to the child's program plan was handled by assigning responsibility for working on the goal or objective to the person suggesting it. If another staff member suggests a goal or objective, the teacher includes it in the plan only if he or she is in agreement with it or if the other staff member agrees to take responsibility for it. In the other districts, teachers said the IEP process had not resulted in conflicts between them and other staff members over decisions related to program development and classroom instruction. In fact, they said the group process often facilitated staff interactions that produced qualitatively better information in the planning process.

There are obvious limits to the extent to which the experiences of the second group of districts can be expected to foreshadow the experiences of other districts in other states which may have quite different circumstances. The experiences of the second group of teachers, however, are consistent with a survey from the State of Connecticut which found members of placement teams to share the perception that the special education teacher was the most appropriate person to suggest students' subject matter needs, suggest instructional methods for students, and to set evaluation criteria for students' academic performance (Fenton, Yoshida, Maxwell & Kaufman, 1977). This certainly implies, as was found in the second group of districts, a continuing, predominant role for the special education teacher in planning the education of handicapped students.

Increased Accountability to Outsiders

Many in the first group of teachers thought that with the implementation of PL 94-142 they would be monitored by outsiders and be held more accountable for

pupil progress because of the specificity of the individualized education plan and the collection of extensive data implied by the law. These concerns seemed to stem from two sources. On the one hand, some teachers believed that any federal law implies more accountability on the part of persons whose functions are affected by its mandated provisions than would a state or local regulation. In the case of PL 94-142, teachers in the first group assumed that federal regulation of certain elements of educational planning and programming would mean actual monitoring, perhaps even federal monitoring, of the teaching function and the teacher. On the other hand, teachers viewed the law's provision that measurable evaluative criteria be included in the educational program plan to mean that continuous measurable progress for each child was expected, an expectation they thought put unreasonable pressure on them as teachers. They pointed out that factors over which the teacher has little or no control, such as the home situation, available resources, or the child's physical or emotional condition, often interfere with teaching efforts and slow the child's progress, necessitating substantial revision of goals or objectives.

Many teachers were concerned that the IEP would be used by parents and school administrators to measure teacher performance, or by the state or federal government to monitor a district's compliance with the law. They had many reservations about such people's knowledge or awareness of the actual classroom situation. Consequently, they considered setting general objectives in the child's plan as preferable to the risk of being seen as a failure or being held liable. (One should note that the regulation governing PL 94-142 states that the IEP document is not a legal contract and, therefore, teachers and school districts cannot be held liable for a child's failure to attain a specified objective.)

In summary, concerns of teachers in the first group focused on their perception that under PL 94-142 they would be charged with producing continuous measurable progress toward goals and objectives with which they might not fully agree and, furthermore, that their success in so doing would be the sole criteria used by persons unfamiliar with the classroom situation or the child's functioning in that classroom in judging teaching effectiveness.

The issue of accountability was difficult to pursue in the second group of districts, because teachers virtually dismissed as impossible the idea of being monitored by unknowledgeable outsiders. These teachers viewed accountability not as a threat in the sense of liability, but from a personal perspective, as a function of the teaching job. To them, acceptance of the job meant also the acceptance of personal responsibility for facilitating pupil progress.

Thus, all the teachers interviewed in the second group saw the continual measurement of pupil progress as helping them monitor their own teaching effectiveness on an ongoing basis. Each stressed the importance of data collection and detailed record-keeping in enhancing their ability to continuously monitor pupil progress and to respond quickly and effectively to the child's learning needs. Without accurate, up-to-date records on each child, teachers questioned how they could identify current levels of performance, plan for the next step in any given area, or determine what materials and methods to employ. They found the extensive documentation to be so useful that, even without being required to do so, they claimed they would continue it as part of their teaching.

While teachers in the first group were concerned that a child's failure to meet a goal or objective set out in the IEP might reflect negatively upon them, teachers in the second group of districts expressed no such concern. On the contrary, they said that a child's failure to attain a particular objective provides them with important information. They use their records on the child to help determine an approach that might work better in teaching the objective or perhaps to select another, simpler objective.

These teachers in the second group expressed a similar attitude about projecting a child's expected progress. They did not think that missing one of their projections reflects on them personally. Their attitude was that a goal or objective is at best an estimate of where the child is going and that everyone involved accepts that view. These teachers essentially had confidence in their ability to effect pupil progress and viewed accountability in terms of their own responsibility toward the child rather than in terms of potential personal or district liability.

This attitude undoubtedly derived from the tone set at the district level. Clearly, these teachers never had been "brought to task" for failing to promote progress with a child or to attain a goal or objective. Although teachers in two of the districts met regularly with district personnel to discuss pupil progress and teachers in all of the districts met regularly with parents, the sessions were viewed as problem solving sessions, not checks on the teacher. These teachers also expressed confidence that if a parent should ever charge a teacher with not meeting a goal or objective that had turned out to be unfeasible, the teacher would receive full support by the district.

As PL 94-142 is implemented nationally, one can expect that a district's posture toward group planning and teacher accountability will affect its teachers' attitudes. In districts where the IEP conference and review sessions are perceived by all involved as cooperative, problem solving sessions rather than checks on the teacher, teachers' experiences and perspectives hopefully will be positive. On the other hand, in districts where an

atmosphere of distrust prevails among staff members or between parents and school personnel, teachers may indeed feel they are being put on the defensive.

Demands on Personal Time

Teachers interviewed in the first group of districts expressed concern that carrying out the tasks associated with individualized education programming would place extraordinary demands on their already overcommitted time. Teachers reported that they presently were working long hours preparing lessons, developing materials, and keeping records. They believed that to carry out informal assessments, write annual goals and short term objectives, coordinate with other professionals, and meet with parents, they would have to commit increasing amounts of their personal time to fulfilling their teaching functions. Though a number of teachers in the first group stated that they already were individualizing instruction in their classroom, teachers were still apprehensive about the time required to prepare individualized learning activities for their students, as well as the time required to keep detailed records of progress for each student. Teachers expressed fears that the additional time would be at the expense of their families, professional development, or other outside interests.

One of the supposed benefits of a teaching career has been the shorter working day (Lortie, 1975). Surveys have suggested, however, that although teachers spend fewer than the standard 40 hours in classroom instruction their other job-related activities add considerable time to the total. A National Education Association survey (1967), for example, found that elementary teachers worked an average of 46.5 hours per week, and secondary teachers worked 48.3. A similar survey by New York Teacher's Association (cited in Anderson, Christin, Hunsberger, 1974) found that elementary teachers spent 47.8 hours in school related activities, and secondary teachers spent 50.3 hours. Breaking down the figure for elementary teachers, this survey reported that 36.7 hours were spent in the classroom, 9.6 hours in preparing lessons and grading papers, and 1.5 hours in professional activities.

Special education teachers interviewed in the four states in the Project IEP study stated that they worked even longer hours than their regular education counterparts, a viewpoint that principals and directors of special education tended to confirm. Assuming that the special education teachers interviewed were spending only the average number of hours reported in the national survey for elementary teachers, it is hardly surprising that they would be concerned about the assignment of other potentially time-consuming responsibilities.

Formally developed individualized education programs are a relatively new and little studied innovation. Further, IEP development time can be expected to vary depending on grade level, type of handicap, local procedures, and whether the IEP is for a current special education student or a new referral. One recent study found that the average amount of time a teacher spends collecting data and writing an IEP for each preschool handicapped child was 10.9 hours, and the median was 5.0 hours (Davis, 1977). (The author of that paper suggests that because of extreme scores, the median is a more accurate estimate than the mean.) Even the more conservative figure, multiplied by the number of children in the average special education resource or self-contained class, results in a considerable number of potential hours.

In the second group of districts, most teachers confirmed the heavy time commitment required of teachers in writing and implementing individualized education programs for handicapped children. In three of the districts, the estimated number of hours spent per week in job-related activities ranged from 55 to 67 hours among the teachers interviewed. These teachers reported spending time before and after their instructional day locating or developing materials for individual pupils, writing short-term objectives, keeping records, conferring with other teachers and support personnel, and assessing and developing IEPs for new referrals. Most teachers stated that they had to spend even more time in the fall and spring in administering informal assessments, writing goals and objectives, contacting parents, and attending conferences for each student they instructed.

When asked about the length of time usually required to actually complete an IEP, these teachers estimated 5 to 6-1/2 hours for a new referral and 2 to 4 hours for a student currently in the program. For new referrals, teachers reported spending 2 to 3 hours assessing the child, 1 to 2 hours writing goals and objectives, 1/2 hour arranging the conference, and 1 to 1-1/2 hours in the IEP conference. In reviewing the plans of current students, teachers may spend up to 2 hours assessing the child, 1/2 hour writing goals and objectives, 1/2 hour arranging the IEP conference, and 1 hour in the conference. None of the districts in the second group compensated teachers in any way for hours spent beyond contract time.

Teachers in these districts, though adamant in their support for individualized, data-based instruction, nonetheless spoke with some discouragement about the time involved. One teacher spoke of the frustrations she felt in spending more than 55 hours a week at her job and still not being able to get everything done. "It's hard," she said, "never getting closure." Another teacher referred to the long, uncompensated hours by saying, "It's worth it, but it's not right."

Teachers, directors of special education, and a principal in the second group of districts referred to teacher "burn out" when extraordinarily long hours are required just to get the job done. Several teachers wondered aloud how long they would be able to keep up the pace before they would give up and quit. One director of special education actually reported that the district anticipated that teachers would have "two to three good years" and then move on to something else.

Data from three of the four districts in the second group, then, essentially confirmed the legitimacy of concern for personal time that was expressed by the first group of teachers. An issue emerging from interviews with all of the teachers focuses on the amount of time and energy that can justly be demanded of special education teachers without compensation. Some have suggested that the IEP requirements of PL 94-142 in some sense formalize the heart of special education—diagnostic/prescriptive teaching—but can any system of teaching be valid if it is at the expense of special education teachers?

Experiences of three of the districts in the second group suggest that, at present, implementation of individualized education programming relies to a great extent on the good will and dedication of special education teachers, not on the provision of adequate resources. But the resulting phenomenon of special education teacher "burn out" cannot be ignored. A turnover of teachers, say, every three to five years would be a waste of both training and valuable experience. Equally disturbing are the potential effects on students of "burned out" teachers who decide to stay.

Persons interviewed in the first group of districts suggested that implementation of individualized education would require more planning time for special education teachers. Suggestions included: providing additional support staff to assist in noninstructional tasks, hiring additional specialists such as art, music, or physical education teachers to relieve special education teachers by allowing them free periods during the day, compensating teachers for work after hours, moving to 12-month contracts for special education teachers, and designing forms, procedures, and support systems that facilitate the tasks of the teacher.

Most of the suggestions, of course, require increased fiscal commitment by the local education agency. For the most part, the directors of special education interviewed in the second group of districts stated that they were unable to make such a fiscal commitment, although they tried in every way possible to continually increase aide time available to teachers. Because of fiscal limitations, the directors primarily attempted to alleviate the tasks of special education teachers by streamlining forms and procedures and developing resource systems for support.

That district planning and effort expended in this way could be effective was particularly demonstrated in one of the four districts included in the second group. The planning procedures, forms, and available resource support system in this district were perhaps the most elaborate and comprehensive of the districts in the second group. Teachers interviewed in this district expressed obvious enthusiasm for their jobs. For the most part, these teachers stated they spent only 5 to 10 hours per week beyond contract time, giving them a 40 to 50 hour work week. The exception they cited was during the period of IEP development or review, when parent conferences required them to spend more time before or after school.

New Requisite Skills

A final area of concern expressed by special education teachers in the first group of districts centered on their feelings that they might not have the skills necessary to carry out all the tasks required or implied by individualized educational programming. Some teachers believed that to adequately fulfill the provisions of the federal law, they would need training in performing educational assessments, identifying and projecting appropriate goals and objectives, writing annual goals and short-term objectives, collecting data, managing individualized classroom instruction, and communicating with parents.

Both teachers and administrators in the first group agreed that much inservice training would be necessary to inform teachers of the new policies and procedures and to provide training in required skill areas in which deficiencies existed. Persons interviewed, however, did not specifically state the skills they thought teachers would lack or the extent to which the special education teaching population could be expected to need additional training.

All the teachers interviewed in the second group of districts reported that although they had needed more information about new procedures when state or federal regulations were introduced, they had developed most of the requisite skills for implementing individualized education programs during their university training courses. Directors of special education in the second group agreed that, in most instances, teachers who had received their special education training in the last few years needed little additional training except for learning specific district policies and procedures. Two of the directors stated that they had avoided the need for additional training to a great extent by careful hiring practices during the past few years; in both districts, virtually all of the teachers who remained in the system had received extensive training in diagnostic/prescriptive teaching as part of their university program. In the remaining two

districts, directors and teachers reported the necessity of providing training beyond an explanation of new policies and procedures to some, although not most, of the teachers in the district.

Directors and teachers in the second group of districts stated that learning to project goals and objectives for a specific period of time and matching appropriate materials with goals and objectives tended to cause teachers the most problems. All agreed that while some training in these skills could be useful, they developed primarily from experience; that is, these teachers believed that familiarity with materials, understanding curricular sequences of objectives, and ease in using alternative instructional methods developed after a few years of actually planning for and instructing handicapped children.

In contrast, many teachers believed that writing goals and objectives could be taught successfully in a workshop format. In one district, teachers referred to in-service training sessions they had held in which participants developed actual goals and objectives for children, then critiqued each other's work. Although those involved thought this format was successful, they expanded on their statements by suggesting that much on-the-job practice must follow if the writing of behavioral objectives is to become automatic. This district also had presented several workshops in various curricular areas that focused on developmental sequences of skills, since they had found that many teachers have difficulty in sequencing goals and objectives. Their experience seemed to be that this was a useful way to spend in-service time, although it was still necessary for teachers to have continual access to various curriculum guides and objective banks.

Although interviews in the second group of districts confirmed the need for in-service training, interviewees seemed to think that need was less critical and seemed less concerned about the scope and amount of in-service training required. In part, this opinion may stem again from the fact that almost all of the teachers in these districts had received special education training at either a bachelor's or master's level within the past five years and, further, that they had received this training from institutions stressing the skills needed to provide individualized education programs. Unfortunately, we do not know how typical this situation is. Certainly, we have reason to believe that the trend toward diagnostic/prescriptive teaching in special education is reflected increasingly in special education training programs. Thus, we may expect that teachers trained within the last five years would, at a minimum, be able to perform educational assessments and write behavioral goals and objectives. The issue is, then, what percentage of teachers this might include.

Information from one recent study, Project PRIME, showed that 42 to 43 percent of special education teachers had been teaching five years or less (Baker, Safer, & Guskin, 1977). One may reasonably assume that at least some of the teachers with more years of teaching experience would have pursued master's degrees in special education or would have switched from regular to special education and taken college classes since the beginning of their teaching careers. This assumption still leads to the conclusion that, despite the experience of the second group of teachers, a sizeable number (though probably not a majority) of special education teachers in many school districts across the nation may be lacking certain skills necessary for providing individualized education programs to handicapped children.

Information from the second group of districts does suggest that although some skills, such as writing goals and objectives, can be taught relatively easily in a workshop format, other skills, such as learning to project annual goals, simply may require experience in doing the task. Much evidence suggests that before launching a major in-service training program, districts should assess carefully the percentage of teachers who actually lack requisite skills, the specific skills lacking, and whether those skills can be acquired by training.

Comment on Perceptions of Changes in Teacher Role and Job Requirements

Special education teachers interviewed during Project IEP confirmed that the impact of implementation of individualized educational programming would be to change the nature of their role as teacher from that of providers of instruction to instructional managers. Essentially, they saw some *basic* changes to their role. The work of Lortie (1975) suggests that role changes, particularly ones that affect the reward system offered by a job or career, can have a major impact on job satisfaction or morale. Among the types of role changes that could particularly affect the "psychic rewards" received by teachers were: less direct instruction by teachers because of noninstructional activities, loss of teacher control over classroom activities, and increased accountability to outsiders.

In examining the perceptions of teachers in the first group, the Project IEP study found that they perceive implementation of individualized educational programming as changing their roles in exactly these ways, as well as placing inordinate demands on their time and requiring skills they don't have. Thus, they gave reason to believe that the anticipated changes are important in terms of teacher role—changes that could affect their satisfaction with teaching and their morale.

A different perspective characterized the second group of teachers. Although the changes in teacher role anticipated by teachers in the first group were confirmed, teachers in the second group did not perceive those changes negatively. Most of the second group teachers did report spending a lot of time supervising, preparing materials, writing objectives, and keeping records rather than directly instructing pupils; but they saw these tasks as related to instruction and an integral part of their teaching. In addition, these teachers saw themselves as still controlling the educational program in their classrooms and as having most of the skills they needed to implement individualized education programs. Instead of fearing liability from monitoring, the second group of teachers considered the detailed records they kept to be primarily a tool that helped them monitor their own teaching effectiveness rather than evidence that others would use in judging them. The only real concern expressed by teachers in the second group dealt with the extraordinary amount of time they had to spend to adequately carry out the various tasks associated with their role.

The discrepant pictures painted by the two groups of special education teachers raise a question: Will the concerns expressed by the first group, concerns which Lortie's work suggests could be serious, simply disappear given greater experience with the IEP process? Several factors suggest that, at least in some instances, they won't.

When teachers and directors of special education in the second group of districts were asked why they thought implementation of individualized educational programming had worked in their districts—how they had avoided many of the problems anticipated in other districts and other states—they touched on several common themes. Essentially, these related to the ways in which changes were undertaken and facets of administrative support which the districts offered to teachers. Maybe districts that did not approach change in the same way or did not offer teachers adequate administrative support would experience many more of the anticipated problems.

Of possibly even greater significance in explaining the divergent perspectives may be that most of the teachers interviewed in the second group of districts had received their special education training within the past five years from institutions focusing on a diagnostic/prescriptive approach to special education combined with elements of precision or data-based instruction. The IEP process mandated by PL 94-142 has been interpreted as closely following the tenets of diagnostic/prescriptive, data-based teaching; teachers thoroughly trained in this approach, therefore, would be more inclined to perceive implementation of individualized educational program-

ming not so much as changing their role as bringing it in line with special education teaching as they believe it should be. Since rapidly increasing numbers of training programs have adopted a diagnostic/prescriptive approach over the past few years, a growing number of teachers across the country will likely deemphasize the role changes associated with individualized educational programming as, at most, a problem of logistics.

At the same time, one must remember that diagnostic/prescriptive, data-based teaching is only one of several potentially valid approaches to teaching children. To teachers holding other educational philosophies or perspectives, the role changes associated with implementation of federal and state regulations indeed may seem major. To these teachers, the IEP process may appear to be no more than a series of clerical tasks, pulling them away from teaching children, decreasing their control over their classroom programs, and ultimately resulting in lowered morale. Certainly this is a perspective of which to be cognizant.

IMPLEMENTATION STRATEGIES AND ADMINISTRATIVE SUPPORT TO TEACHERS

When asked why their systems worked as well as they did, directors of special education and special education teachers in the second group of districts cited two significant factors: the *implementation strategies* used when individualized instruction was initiated, and the *support systems* available to teachers.

In reviewing the research on implementation of new curricula and instructional methods, Fullan and Pomfret (1977) suggest four strategies that are important in the successful implementation of innovations. These are: *participation in decision making*, *in-service training*, *resource support*, and *feedback mechanisms*. It was interesting to note that the practices described by administrators and teachers in the second group of districts fell into these four categories.

Participation in Decision Making

In three of the second group districts, administrators involved teachers from the beginning in planning for implementation of individualized educational programming. Either as individual consultants or as members of task force committees, teachers worked with administrators in comparing current practices with future goals and new mandates to determine the specific areas in which changes would have to be made. Also, they suggested strategies for facilitating the required changes in district

policies, procedures, responsibilities, and forms, and identified the skills and knowledge teachers would need in order to assume new responsibilities. Further, they designed in-service training directed toward acquisition of those new requisite skills for implementing individualized educational programming. Teachers and administrators emphasized that this joint planning fostered an accepting attitude toward the changes that extended beyond the few who participated in the planning effort.

Since newly identified responsibilities and procedures reflected teachers' concerns for educational relevance and instructional utility, they were more readily accepted than if they simply had been imposed by administrators. In two of the districts, other school personnel such as psychologists and education specialists were included in the planning efforts because of the interrelationship of functions and responsibilities associated with providing individualized education programs to children with handicapping conditions. Those interviewed agreed that consideration of multiple perspectives resulted in development of a system responsive to the concerns of all who would be involved in its implementation. Therefore, the inclusion of teachers and other staff members in determining district policies and practices related to individualized educational programming was reported as a critical factor to successful implementation in all of the second group of districts.

In-Service Training

As mentioned previously, all of the districts in the second group had used in-service training sessions to acquaint teachers with new policies and procedures, and to teach skills such as writing behavioral objectives and sequencing goals and objectives when necessary. All four directors of special education and most teachers emphasized the important role that in-service training had played in the success of implementation. In addition, two of the four directors said that in-service training has become an integral part of their special education program. Workshops in these districts are held on a regular basis, about twice a month after school. The topics presented are selected largely on the basis of teacher suggestions. Additionally, teachers proficient in particular skill areas often plan and conduct the in-service training sessions, which reportedly are well received.

Beyond workshop-type in-service training, one of the second group of districts used a mentor system to orient new special education teachers. In this district an educational specialist is assigned to each new teacher for the first month of school. Citing the complexity of individualized educational programming, and particularly of

this district's IEP system, the director and teachers said it usually takes a year of experience before a new teacher feels comfortable managing all the tasks and responsibilities associated with the teacher role. To facilitate the new teacher's entry into the system, the educational consultant is available both during and after school hours and serves as a resource for any areas in which the teacher needs help. All those interviewed believed this approach to be an important supplement to the usual in-service activities.

Resource Support

Teachers and administrators in the second group of districts identified ways in which teachers were receiving support in carrying out their planning and instructional responsibilities. The teachers found this support critical to providing effective individualized education. Resource support included: provision of assessment systems, sequences of objectives, adequate materials cross-referenced to objectives, standardized forms, aides, and consultative assistance.

Each district was found to employ practices that effectively reduced the amount of teacher time and effort to complete tasks associated with planning. Three of the districts had adopted a standard battery of assessment instruments which was quickly and easily administered and thought to be particularly useful in determining the child's level of functioning in various skill areas. Two of these districts actually had developed their own assessment instruments; these instruments allowed a child's performance on a particular scale to be translated immediately into specific objectives from an objectives sequence.

Availability of sets sequences objectives in at least the basic skill areas of reading, math, and spelling also was cited as extremely useful in formulating individualized education plans. In three districts, the objectives sequences had been developed by the teachers and tested in the district for at least a year. According to those interviewed, objectives are stated simply, are highly specific, and are accompanied by appropriate evaluation criteria. Once the child's current level of performance in a skill area has been determined, the teacher automatically selects an appropriate objective from the continuum of skills and attaches a copy of the sequence to the child's program plan.

Since statements of objective criteria accompany each objective, little teacher time is devoted to determining appropriate evaluation measures. Teachers and administrators both pointed out that sequenced objectives stated with the evaluation component were particularly helpful to newer teachers not yet experienced either in sequenc-

ing tasks or in determining appropriate measurement criteria. Several teachers said that sequenced objectives in basic subject areas meant that teachers did not have to “reinvent the wheel” and could devote their time to other things.

Resource support in the area of materials was another important feature listed by special education teachers in the second group of districts. In three of these districts, teachers had access to numerous commercially-produced or teacher-generated materials at either the building or district level or both; nonetheless, they reported spending considerable time searching for materials appropriate for particular objectives or developing materials themselves.

In one of the districts, however, teachers indicated that their resource system in the area of materials was particularly helpful and supportive. This district, which operates with district-generated sequences of objectives in basic skill areas, has materials cross-referenced to objectives in such a way that teachers can easily select an appropriate commercial material for a particular objective. Several choices are listed whenever possible so that teachers may use the materials they prefer and so that alternatives are available to meet the needs of different children. This district also maintains a highly organized materials center, which includes teacher-generated and tested materials organized both by objective and subject area. Thus, in this district, the process of determining an objective, identifying appropriate materials to teach it, and procuring the materials is relatively simple and, teachers reported, not time consuming. Teachers said they still develop new materials as they see the need for them, but they do not have to devote continual attention to the task.

A final type of support identified as essential to facilitating the planning function was a rational set of forms for planning and record keeping. Teachers and the directors of special education in three districts of the second group agreed that the outstanding features of the system of forms used in their districts are that they parallel the planning process, feed directly into one another, and are useful to teachers for both long-range and daily instructional planning. While the forms differed in format from one district to another, they all enabled teachers and other staff to easily and concisely record all essential planning data related to assessment, goals, objectives, and evaluation, and to record pupil progress for each objective on a continuing basis. In each of the three districts, the forms used in the IEP process had been designed to support teachers' information needs so that further documentation in the form of daily lesson planning or record keeping was not necessary.

While stressing the importance of support to teachers in carrying out their planning tasks, teachers and admin-

istrators in the second group of districts believed that individualized education was possible only in conjunction with *classroom* support. To varying degrees, these districts provided such support.

In each district, teachers reported having three to four hours daily of teacher aide time. In addition, student or community volunteers or student interns were assigned to assist teachers in the classroom. Depending upon their experience and training, these people were given such responsibilities as instruction, data collection, record keeping, and preparing student folders. Teachers said that, although coordination of additional personnel is sometimes difficult, the assistance they provide is invaluable. Two of the four district directors of special education said they deemed aide assistance so important in carrying out individualized instruction that they commit their scarce resources to it at the expense of other budget items.

In addition to assistance in the classroom, one of the second group of districts was experimenting with a rather innovative approach referred to as the *teacher advisor model*. This model assigns either a psychologist, communication disorders specialist, or education specialist to work on a continuing basis with each special education teacher. Twice weekly the advisor visits the classroom, either to observe, experiment with a new instructional strategy, or to work with a child in need of special help—in general, to be of whatever service the advisor and teacher agree to. The two of them meet once a week for discussions about changes in individual programs and classroom activities. Teachers said this model is a source of continual feedback to them on their teaching, and considered it a particularly supportive approach.

Feedback Mechanism

No formal feedback mechanism was discussed in any of the second group of districts. At the same time, it was apparent in talking to teachers and administrators that informal feedback is a continuous process in these districts. In all four districts, policies and practices concerning individualized educational programming had changed over a period of time as teachers and other staff members determined what seemed to work or didn't work. Two of the districts reported almost weekly meetings with the entire special education staff of the district to exchange information and discuss various practices. The critical function of feedback seemed to be adequately served in these districts on an informal basis.

Comment on Implementation Strategies and Support to Teachers

Information from the second group of districts suggested that successful implementation of individualized programming depended in part on the implementation strategies and support systems adopted by the district. Fullan and Pomfret (1977) suggested four strategies and tactics important to the successful implementation of innovations—participation in decision making, in-service training, resource support, and feedback mechanisms. The critical practices and policies described in the second group of districts fit into these strategy categories. Fullan and Pomfret also suggested that the four types of strategies or tactics are interactive in the sense that the absence of any one reduces the effectiveness of the others. Though the information from the Project IEP study is not such that this interactive effect can be examined, some evidence indicated that the degree of comprehensiveness in the implementation strategies and support system offered by a district had a cumulative effect on teacher morale and satisfaction.

For example, one of the second group of districts had developed an assessment battery leading directly to objective sequences which, in turn, were cross-referenced to materials. This same district was experimenting with the mentor in-service approach for orienting new teachers, as well as the teacher advisor model. Although teachers in all four districts expressed satisfaction with their role as special education teacher, teachers in this particular district were the most enthusiastic, stating that even the time demands were reasonable. And when asked what made their role so satisfying, all of the teachers interviewed in this district replied that the system of support offered by the district essentially freed them to teach in a way they believed in and thought personally fulfilling. Thus, the implementation strategies and systems of support developed by the second group of districts seem to be critical in implementing individualized educational programming for handicapped children.

SUMMARY AND IMPLICATIONS

Potential role changes and changes in job requirements for special education teachers related to the implementation of individualized educational programming include less direct instruction because of teacher resources expended on noninstructional tasks, shared responsibility for classroom activities, increased accountability to outsiders, demands on teacher time, and new requisite skills. Though all of these changes were confirmed by

interviews in the second group of districts, they did not necessarily result in low morale and decreased job satisfaction. Three factors seemed critical in determining whether changes resulted in decreased satisfaction—teacher beliefs and style, time, and district implementation strategies and support to teachers.

Teacher Beliefs and Style

One crucial factor related to teacher morale and job satisfaction appears to be the degree to which the model of individualized education selected by an LEA or state is flexible enough to accommodate varying teacher beliefs and styles.

The four districts in the second group had selected models of individualized education that were data-based and behaviorally oriented. This selection was compatible with the orientation expressed by teachers in these districts, many of whom had been trained in a precision-teaching model; thus, these teachers were satisfied with the model of individualized educational programming they were using.

The language used in PL 94-142 tends to lend itself to a similar data-based, behaviorally oriented interpretation, although that may or may not have been the lawmakers' intent. An example of such an interpretation is given in an article by Lilly (1977), which stresses highly specific, performance based objectives, quantitative evaluative criteria, collection of baseline data, and frequent (twice weekly) measurement and recording of progress. This orientation may not be compatible with all teaching styles and beliefs. For instance, a teacher oriented toward a Piagetian style of teaching might be interested in helping a child move from one cognitive stage to another. The process of considering the child's current level, where the child should be going, how to move toward that point, and signs indicating that the child has reached the new stage should be useful to such a teacher. However, stipulating highly specific objectives and quantitative criteria may not be as useful in this case as stating less specific objectives and some qualitative signs as criteria. Further, frequent measurement actually may interfere with the type of learning environment the teacher is trying to establish. If forced to use a highly specific, data-based model of individualized education, the teacher may feel that he or she is wasting time planning and record keeping. Such feelings could result in frustration and low morale.

If evidence existed that a behavioral, data-based orientation to planning and instruction resulted in greater achievement for handicapped children, one would have good reason for insisting on such an approach to individualized educational programming. Such evidence,

however, does not exist at present. Furthermore, the regulations to PL 94-142 do not require that objectives be written in performance terms, that evaluative criteria be quantitative, or that measurements of progress take place more than once a year.

In establishing policies and procedures for individualized educational programming, then, districts should consider carefully the orientation and flexibility implied by those procedures. A decision to require highly specific behavioral objectives, quantitative criteria, and frequent record keeping should reflect a conscious and articulated decision to orient special education to a precision-teaching, data-based approach.

There also is a need to explore the individualized educational programming process to determine alternative ways it can be structured both to meet federal and state regulations and to be relevant to teachers with differing beliefs and styles. Likely, provisions of the federal law can be interpreted more flexibly than they often are. For example, a list of *qualitative* signs that indicate achievement of an objective should be considered as valid as *quantitative* criteria. Also, one could contend that "objective criteria" simply means the judgment of persons other than those directly working with the child. Then, agreement of the IEP committee, including the parent or outside observers, that a child has "a more positive self concept" or is "less hyperactive" might serve as sufficient evidence that an objective is being met.

A similar need exists for exploring the instructional options for individualized educational programming. Although it has been assumed that much more individual instruction will now take place within the classroom, *individualized education is not synonymous with individual education*. Work stations with individual assignments are certainly one option for providing individualized educational programming, but other options, such as teaching a group lesson at several different levels to meet the needs of different children, also exist. For example, a teacher conducting a group discussion following a science demonstration might expect some children to name only the materials used (vocabulary building), others to express themselves using complete sentences, and still others to make certain inferences related to the demonstrated concepts. Certainly, much creative thinking should be devoted to determining a wide range of viable instructional options for providing individualized educational programming.

Time

Information from the second group of districts suggested that most teachers were spending extensive

amounts of time carrying out their planning and instructional tasks. Concerns were expressed that teacher "burn out" is becoming an increasing problem in special education because of the greater time demands placed on special education teachers.

Although most teachers in the second group of districts clearly were spending much more than their contract time, how much of this time was related to individualized educational programming is difficult to determine. No figures were gathered in the initial interviews in the four states, but special education teachers in those states suggested that they too spend considerably more time each week than their contract called for. Previous surveys suggest that special education teachers in general easily could be spending 50 hours or more a week in instructionally related tasks, a figure only slightly less than that reported in the second group of districts. To the degree, then, that tasks associated with individualized educational programming replace or facilitate other teacher tasks, the additional time attributed to individualized education actually may be minimal. This suggests a need to streamline the IEP process to make it useful and compatible with other teaching functions, presumably at the LEA level, in conjunction with teachers. In addition, resource support provided by the district to teachers is critical in reducing teacher time associated with individualized educational programming.

Beyond the time demands imposed by individualized educational programming, however, information from both the first and second groups of districts suggests a more basic issue related to the inordinate demands on teacher time that seems to be a general function of special education teaching. In some ways, the implementation of individualized educational programming may be serving as a focus for time-related concerns and dissatisfaction that probably existed prior to any of the current changes. This suggests a possible need for some basic changes in the educational system, to alleviate the inordinate demands on teacher time.

Several areas appear to have potential for change and deserve exploration. First, there may be a need to change the ways time is viewed and allocated. The concept of modular scheduling, in which time is a variable changing day by day and week by week, might be one alternative. Under modular scheduling, a student, for example, might go to the resource room one day for three hours during some weeks rather than going every day at ten o'clock for one hour. The group in the resource room at the same time might also vary on different days with grouping and regrouping occurring constantly on the basis of the children's needs. Modular scheduling, then, might allow needed flexibility, as well as eliminate a certain amount of redundancy in preparation and instruction on the teacher's part.

There also may be a need to reconsider the roles of various personnel. Within the second group of teachers, all were highly involved in both individualized educational planning and instruction. Creating special roles such as master teachers or educational specialists to carry out many of the planning functions could free other teachers to devote their time to instruction. A problem with this approach, however, was suggested by Lortie's work (1975): It would increase the likelihood of teachers' feeling they were not controlling the activities in their classrooms—that many classroom activities were determined by other persons.

Also, new ways of grouping students might be necessary to reduce the number of separate preparations required. One approach might be departmentalization within schools to reduce the number of subject areas for which any one teacher is responsible. Team teaching might reduce preparation time by providing a larger pool of students from which groups could be formed on the basis of similar educational needs. Ideally, such groups would be flexible, changing from skill to skill. Again, however, Lortie's work (1975) suggests that, given the traditionally cellular nature of schools, teachers may not be used to cooperative teaching arrangements. So new interaction patterns among teachers may have to be developed if such arrangements were to succeed.

Obviously, none of these concepts is new. They are intended only as examples of potential areas of change in the structure of education that might prove fruitful in solving an important and complex challenge currently facing special educators.

Implementation Strategies and Support Systems

Discussions with teachers and directors of special education in the second group of districts suggested that the way in which individualized educational programming is implemented and the support the district provides teachers are critical factors in successful implementation. To maximize the effectiveness of implementation of individualized educational programming as an innovation, the requirements and procedures of a school system should not only be rational but also should be designed to be compatible with the instructional approaches of teachers in the district. Involving teachers in planning for implementation assures that, to the extent possible, the emerging system is responsive to their concerns and reflective of their educational beliefs. Teacher involvement in planning may further engender a sense of commitment among the teaching staff toward successful implementation of individualized educational programming in their classrooms.

The experience of the second group of districts suggests another strategy important to implementation. A district needs to carefully design in-service training, to explain the new system and to teach requisite skills teachers may need to carry it out. Skill training should be based upon careful assessment of the new skills teachers will need. Some indications are that in-service training may be more effective if it is provided on a systematic, ongoing basis rather than as a one-time workshop, and if district personnel rather than "outside experts" are involved whenever possible in planning or conducting the sessions.

A third strategy to consider during implementation is the use of a feedback system at the district level which enables administrators to maintain close contact with teachers so problems in the system can be identified and worked out as they arise.

A final factor that seems crucial to the way individualized educational programming is implemented reflects the key role of the district administrator. Clearly, administrators have a responsibility to demonstrate a positive attitude toward implementation and to establish a productive atmosphere in which it can take place. When sharing responsibility for development and review of educational programs with others is new, the district can foster a positive attitude among teachers by approaching the planning meetings as cooperative problem-solving sessions rather than reviews of teacher performance. In the same way, the administrator is in a unique position to promote open communication among school staff and between staff and parents, who also share in the program planning process.

District planning to develop a support system also seems critical to successful implementation of individualized educational programming. It is especially important that the various components of program planning be linked to one another. For example, assessment batteries that quickly translate into instructional goals and objectives should be made available. Access to references of objectives in various skill areas reduces demands on teacher time. Having materials cross-referenced to goals and objectives also seems to save teachers' planning time as does having numerous materials readily accessible. Above all, the forms used to document elements of the child's program must be rational and parallel to the planning process so the teacher is not continually completing multiple forms for different but overlapping purposes. Building the required record keeping information into the forms is particularly helpful in that little, if any, rewriting or paper shuffling is necessary.

The experience of the second group of districts clearly indicates a need for the district to provide as much in-class assistance as possible. Teachers need aides—as

many and for as long as resources permit. Teachers also may benefit from having access to consulting personnel on a regular basis. If aide time is limited, volunteers may need to be brought into the classroom, and experimentation with such strategies as peer tutoring may prove valuable. In exploring options for classroom assistance and then planning for other provisions, however, districts must recognize that the addition of someone to the class does not cut the teacher's job proportionately. Untrained persons do not have the same instructional skills as the teacher, so their help in the classroom may be limited to certain activities. And teacher time is required to supervise and coordinate the activities of others in the classroom, as well as to provide some training to new assistants.

CONCLUSION

The concept of individualized educational programming for handicapped children clearly is not new in special education. Previous efforts to achieve implementation at the classroom level on a widespread basis, however, have not been successful. These efforts have been conceptual (calls for reorienting special education instruction), curricular (proposed individualized curricula), and educational (reorientation of teacher training programs) in nature. The commonality is that they all have focused on the teacher and have attempted to change teacher behavior. Findings from Project IEP, however, suggest that to change teacher behavior is not enough. Even the most highly motivated teachers cannot truly implement individualized instruction without great personal sacrifice unless carefully planned administrative support is available at the district level.

PL 94-142 provides a new impetus, this time in the form of a legislative mandate, to implement individualized educational programming. Will this effort succeed where previous efforts have failed? Several factors related to the legislative mandate might favor implementation. First, PL 94-142 places the responsibility for providing individualized educational programs on the LEA and the state—not on the teacher. Thus, districts have greater incentive to assure implementation. To the degree that implementation requires systematic administrative planning and resource support to teachers, the legislative focus on districts' responsibility may assure these efforts. Refocusing attention to the district may promote the needed administrative attitudinal and fiscal commitments.

A second factor relates to the undeniable costs associated with implementing individualized educational

programming. This is a time of limited resources for education in general. Special education is constantly placed in competition with other programs in obtaining critical dollars, including dollars for individualized education. The existence of a federal mandate for individualized educational programming may give special education administrators some of the influence they need in obtaining funds for requisite resources from dollar-conscious school boards and legislatures.

The history of individualized educational programming for handicapped children cautions against excessive optimism that the day of implementation is here. The required changes in teacher role are major, the dangers of lowered morale and dissatisfaction exist, and the requisite resource systems are comprehensive and complex, but at the same time, there is some reason to believe that the legislative mandate provided by PL 94-142 may cause local and state special education administrators to join with special education teachers in searching for viable policies, practices, and resource systems for implementing individualized educational programming at the classroom level. Clearly, the best and only chance for widespread implementation depends upon the cooperation and shared responsibility of all special educators. Perhaps then, the new legislative impetus, in conjunction with reoriented university training programs and curricular innovations, will allow school districts and teachers to make individualized educational programming a reality rather than a goal.

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