CHAPTER 3

Intervention Concepts and Learning Problems

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There is nothing as practical as a good theory.
Kurt Lewin

When his parents were told that David should be placed in a special class, they were not surprised. They had noticed some distressing things at home and had been told by his teachers about other problems. Of course they were concerned—and they were in disagreement about what to do:

MOTHER: I want David to stay in regular classes so he won't feel different from his friends.
FATHER: But he already feels different. He knows he can't do things as well as the others. He says he feels dumb.
MOTHER: He might feel worse in a special class. And besides, he'll miss out on a lot of information and experiences his friends will get.
FATHER: That might be true, but what if keeping him in the regular program prevents him from overcoming his problems or makes them worse? This is the time to help him. We can't afford to waste any time.
MOTHER: I see that, but what will they do in a special class that can't be done in regular ones? Aren't there other treatments?
FATHER: The special teachers have learned special ways to teach children. Other treatments may help, but the school says he will still need special instruction.

Picture yourself as one of David's parents. You want the best for your son, but you really don't know much about the approaches used in treating such problems. You need an overview. In this chapter, a broad introduction to intervention (including assessment) is provided through an exploration of the general nature of intervention and the prevailing approaches used to remedy learning problems.

A Broad Focus

Intervention is something everyone does, but few people take the time to analyze it. In approaching learning problems, some professionals think of assessment, diagnosis, and referral as distinct from intervention. This tends to limit use of the term intervention to teaching or treatment, but in so doing the intervening nature of assessment, diagnosis, and referral is not fully appreciated. All intervention (including procedures to assess, refer, and diagnose) involves decision-making processes, and each decision is a potentially life-shaping event. The intent, of course, is to produce benefits. But not all interventions are beneficial, and every intervention has the potential for negative side effects. For these reasons, it is useful to define intervention broadly. Further, it is essential to appreciate how much intervention activity is shaped by the way the term is defined and by the assumptions made about who or what is its focus.
Defining Intervention

It is natural for professionals to stress benefits in defining intervention. For example,

Intervention is a general term that refers to the application of professional skills to maintain or improve a child's potential for ongoing healthy development. (Suran & Rizzo, 1979, p. 79)

Methods used to intervene are described as "designed to help people change for the better." (Kanner & Goldstein, 1991, p. 1)

With reference to problems, a more neutral definition describes intervention as any directed action upon the deviance predicament between child and community. (Rhodes & Tracy, 1972, p. 28)

On a less positive note, critics have accentuated the fact that intervention is an "interference into the affairs of another" (Illich, 1976; Szasz, 1969).

Various definitions agree that intentional intervention refers to planned actions intended to produce desired changes in existing (usually problematic) conditions of persons or environments. To leave it at that, however, is to ignore some important matters (Adelman & Taylor, 1988). An expanded definition of intervention is needed. In developing such a definition, the following ideas should be considered:

1. Because interventions must be applied flexibly, efforts to produce changes often reflect unplanned, as well as planned, actions.
2. Such actions may or may not produce change. If they do, some outcomes may be unintended, and some may be negative.
3. To avoid a pathological bias, we need to think about desired changes not only in terms of problems but also with reference to nonproblematic conditions.
4. To expand thinking in terms of a transactional view of learning, the focus should be not only on the individual or the environment but also on the transactions between person and environment.

For our purposes, intentional interventions are the planned (and unplanned) actions that result from a desire to produce changes in existing problematic or nonproblematic conditions of a system (person, environment, or the transactions between both). Such actions may or may not produce changes, and if they do, some may be unintended.

Why bother with all this? The importance of broadening the definition can be seen in the following implications:

- There is less chance that negative outcomes and positive side effects will be ignored (because the definition stresses that some intervention actions and changes may be unintended).
- The relevance of positive growth and enrichment activities and outcomes are highlighted (because of the focus on nonproblematic conditions).
- The importance of considering changes in organizations and societal institutions is underscored (because change is not defined simply in terms of the individual).

In sum, a broad and neutral definition of intervention helps maintain a perspective that avoids overemphasizing person-pathology while recognizing the
potential for intervention to do harm. With this expanded definition, intervention encompasses the entire range of responses to individuals or groups seeking educational or psychosocial help. This contrasts markedly with the tendency to view existing conditions as problematic and residing within the individual.

**Broadening the Focus of Intervention**

It is easy to fall into the trap of thinking that interventions for learning problems should always be directed at the individual. This happens because definitions tend to be person centered and because person-centered models of cause and correction dominate professional thinking. One result is that most of what is written about such problems focuses intervention on individuals.

Focusing only on individuals tends to limit assumptions about what is wrong and what needs to change. Adopting a transactional view instead suggests a fuller set of options with respect to who or what should be the object of change (see Figure 3-1). Such a set of options is essential in dealing with the full continuum of learning problems (Types I, II, and III).

**Figure 3-1 Focal Points for Intervention**

Examples of types of intervention:

- Physical changes — medication, special diet
- Psychological/behavioral changes — psychotherapy, counseling, teaching, training
- Environmental manipulation — behavior change strategies, such as altering reinforcement patterns
- Accommodation to individual — environment (home/classroom) change strategies designed to increase the range of acceptable options, to accommodate interests, response styles, and capabilities
- Accommodation by "society" — policy actions designed to increase the range of acceptable options for all persons in a particular setting or throughout the society
- Mutual accommodation — family therapy, school consultation, policy actions designed to optimize intervention
How can James's mother best help him?

We know that professionals are aware that there are cases where an individual's learning problems arise because the environment (home, school, society) has applied inappropriate standards or has limited choices. But we suggest that, despite this awareness, there is a tendency to overemphasize interventions focused on individuals. For instance, interventions that do address the need for changes in the environment often stress the manipulation of reinforcers to control and reshape the actions of those with learning problems.

When a person is identified as having problems, efforts usually focus directly or indirectly on producing changes in the individual. Direct efforts include remediation, psychotherapy, and medically related approaches. Indirect efforts include changing the way parents and teachers interact with the individual. Interventions designed to change the individual may be the most appropriate choice for some. However, the environment sometimes needs to change in ways that accommodate rather than modify individual differences. These environmental changes differ from those used as an indirect way of changing the individual.

Because the distinction is so important, the difference between environment manipulation and environment change is worth underscoring. For example, teaching James's mother behavior-control strategies is not the same as helping her to see the implications of offering James other options when appropriate. Instructing parents and teachers to be more discriminating in their use of reinforcement contingencies is an indirect way of changing the child. It is not the same as helping them to make appropriate changes in their expectations about what is acceptable behavior, performance, and progress, or changing their disciplinary practices.

When the cause of the problem is in the environment, the most appropriate intervention, where feasible, is to change the environment. The change may be to alter situations hostile to the individual or, stated differently, to accommodate either
a specific individual or a wider range of individual differences. Such changes can be seen as preventive in the full sense of the term (Caplan, 1964; Cowen, 1986).

With the rise in popularity of interactional approaches to psychological intervention, especially family therapy, there has been greater emphasis on making both the individual and the environment focal points of change (Alexander & Malouf, 1983; Cook, Howe, & Holliday, 1985; Goldstein, 1988; Patterson, 1986). It remains to be seen whether this trend will result in an expanded focus on environment changes per se.

The implications of broadening the focus of intervention (as presented in Figure 3-1) are immense. For one, environments and the transactions between persons and environments become a primary concern for assessment and correction. Efforts to prevent problems expand to include programs that encourage accommodation of a wider range of individual differences in schools and society. And this broad perspective works against the presumption that most learning problems are caused by CNS dysfunctions.

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**Contemporary Interventions for Learning Problems**

Interventions for learning problems take a variety of forms. Although each may be discussed separately, it is essential not to lose sight of the entire picture.

**Overview**

Figure 3-2 graphically presents the various types of general intervention tasks and services associated with learning problems. The range of activity is extensive, and every facet requires rational planning and decision making. The nature of each task will become clearer as we progress through the book; this section provides only a brief introduction.

It would have been nice if David’s problem had been prevented—or at least identified and treated soon after it appeared. In Chapter 5 we discuss how prevention and early-intervention programs are evolving and show considerable promise. When such programs are completely effective, the need for further services is eliminated. Even in less successful cases, the impact of problems may at least be eased.

Prevention programs also provide a vehicle for early screening. When a problem is identified, the individual may be referred for screening follow-up in the form of further assessment and consultation, which sometimes includes prereferral intervention. Alternatively, the person may be referred directly to one or more special service programs.

In David’s case, his learning problem finally became severe enough for his second-grade teacher to refer him to the school psychologist. In effect, this was David’s initial screening process. Formal screening to identify learning disabilities goes well beyond such spontaneous referrals, however. In the United States,
development of large-scale child-find (screening) programs is mandated by law. All such screening is supposed to be followed by referral for an intensive assessment and consultation.

As is typical in such cases, David's teacher—and then the psychologist—approached the problem with the presumption that he should be the focus of intervention. Thus, the follow-up assessment and consultation consisted primarily of psychoeducational testing, and resulted in a diagnosis of learning disabilities and a referral for special help.

Alternatively, David's teacher might have been offered consultation to explore a variety of strategies to see if formal testing was necessary. This could have helped maintain David in the regular classroom, or at least have provided additional data regarding his special needs. This process of consultation, support, and informal assessment is called prerereferral intervention. Three specific models of
prereferral intervention are one-to-one consultation, teacher assistance teams, and peer collaboration (Chalfant, Pysk, & Moultrie, 1979; Fuchs, 1991; Graden, Casey, & Christenson, 1985; Johnson & Pugach, 1991). These interventions are meant to improve response to the learning problem by the regular classroom teacher and are seen as a good way to reduce the number of students tested, diagnosed, and referred to special programs. Optimally, prereferral consultation can result in a student’s staying in the regular classroom because the teacher has learned new ways to work with the problem. Minimally, such activity can add assessment data that lead to increased validity of diagnoses and referrals. In David’s case, however, there was no effort to explore ways in which the teacher might better address the problem. David was diagnosed and recommended for special placement.

To improve intervention planning and evaluation, Public Law 94-142 included guidelines requiring a multidisciplinary team to prepare a written individualized education program (an IEP) for each student seen as possibly having a disability. The team also provides a mechanism for case management. For example, at referral the team can encourage prereferral interventions; team members do additional, multidisciplinary assessment; they write up a specific program plan and arrange for placement and monitoring of progress (Cruickshank, Morse, & Grant, 1990).

Once diagnosed as having a learning disability, an individual is eligible for services not necessarily available to those with other types of learning problems. For school-age youngsters, any of the following decisions may be made:

- **Class placement.** The student may be kept in regular classes or placed in a special classroom for all or part of the day.
- **Private remedial school.** If there is a need for a special class that the public school cannot provide, the student may leave the school and attend a private remedial school (using public funds for tuition).
- **Extra help.** If the student is kept in regular classes, a collaborative teacher may be brought in at selected times to provide special instruction, or the student may go to a special class part of the day. After-school tutoring may be considered, instead of the other arrangements, or to supplement them.
- **Ancillary services.** In addition to educational services, counseling, psychotherapy, or speech therapy may be recommended for the student. Physicians and other medically related specialists may recommend medication, special diets, vision correction, or various other clinical services. (As discussed in Controversial Treatments and Fads, p. 309, many of these have been challenged.)

For adolescents and adults, options also may include service programs designed to prepare the individual for a vocation or a career. These options may encompass career counseling, job training, and work-study programs that take into account the individual’s special needs. Because few classroom programs are designed for adults with learning disabilities, those who are not enrolled in special
college programs often find that their options for remedial instruction are limited to a clinic's tutorial program or private tutoring.

It should be stressed that, although eligibility for many services requires assignment of a diagnostic label, the types of services just described may be as appropriate (or inappropriate) for anyone with a learning problem. Moreover, because the procedures currently used to diagnose learning disabilities are highly fallible, the possibility that David has been misdiagnosed cannot be ignored.

Given available options, selection and placement decisions have to be made. In David's case, the school psychologist described all the options and recommended placing him in a special class. In the end, David's parents decided the psychologist "knew best." No one asked for David's views, however, and they were not considered. (Later, David indicated that he would not have chosen to be placed in a special class.) The IEP team reviewed the psychologist's recommendations and made the final decision on his eligibility for the special program.

Once a decision was made to enroll David, the matter of transition arose. Many practical and psychological barriers (for example, transportation and funding; fear and anxiety) can interfere with an individual following through on a referral or making a successful adjustment to a new program. A decision to try a service is no guarantee that it will be pursued, and when it is, the program may be experienced as uninviting or even hostile. Increasingly, professionals recognize the importance of interventions that help ensure successful transitions. These include providing detailed activities, stressing personal contacts, and providing social support. Doing these things can smooth over follow-through and program adjustment difficulties.

At another level of transition (from school to postschool), legislation for educating individuals with disabilities has made it mandatory for the IEP to specify needed transition services. Transition services are specified as

- a coordinated set of activities for a student, designated within an outcome-oriented process, which promotes movement from school to postschool activities including postsecondary education, vocational training, integrated employment (including supported employment), continuing and adult education, adult services, independent living or community participation. The coordinated set of activities shall be based upon the individual student's needs, taking into account the student's preferences and interests, and shall include instruction, community experiences, the development of employment and other postschool adult living objectives, and, when appropriate, acquisition of daily living skills and functional vocational evaluation. (Public Law 101-476, enacted in 1990)

Such a transition plan is to specify "interagency responsibilities or linkages (or both) before the student leaves the school setting" and is to be made annually beginning no later than age 16 (earlier when appropriate).
After David enrolled in the program, assessment and consultation efforts centered on guiding each specific intervention toward accomplishing intended outcomes. Each day’s activity was shaped by ongoing assessment and decision-making processes. These processes are discussed in detail in the next chapters and related readings.

Although corrective interventions for learning problems usually are grouped into remediation or treatment, they generally involve a complex set of remedial, treatment, teaching, and enrichment activities. We discuss the prevailing orientations to remediation and treatment in a subsequent section and in the readings; teaching and enrichment are explored in Part 3.

After David has been in the special class for a while, it is essential to use information regarding his daily performance to evaluate previous decisions, as well as his progress and current problems. In particular, the focus of reassessment activity is on such matters as:

1. Was the diagnosis of learning disabilities valid?
2. Was the initial decision to pursue special class placement a good one?
3. Is he making progress?
4. Is anything interfering with progress?
5. Are there any negative side effects?

Eventually, the questions will arise:

6. Has the program accomplished its objectives?
7. Has it done all it can?

And, at some point, decisions will have to be made about leaving this program. For the most part, the ongoing assessment data used for daily planning will be sufficient to help in making such decisions.

When an individual is ready to leave a program, practical and psychological barriers may arise. For example, David may need help in overcoming anxiety about returning to a regular program; he may need to learn specific survival skills if he is to succeed in the mainstream. And, as noted above, if he is ready to leave school, extensive steps must be taken to ensure a good postschool transition.

**The Many Purposes of Assessment**

People are involved in assessment many times each day. Although such assessments are not as formal or systematic as those performed by professionals, the process is the same: they gather information and formulate judgments (and eventually make decisions based on the assessment).
Among some professionals, assessment is referred to as diagnosis, diagnostic testing, or screening. These terms, following medical usage, imply that procedures (commonly tests, ratings, and interviews) are used to look for and label an individual's problem and, perhaps, to analyze it and prescribe treatment. Unfortunately, in education and psychology, this person-centered, problem-focused approach perpetuates a narrow view of learning and behavior problems.

Assessment does not have to be restricted to persons; environments and person–environment transactions can be assessed as well. With learning problems, however, assessment continues to be viewed in terms of screening and diagnosis and is shaped primarily by the presumption that problems stem from and belong to targeted individuals.

Assessment does not have to be restricted to problems; strengths and interests can also be identified and may be important in correcting problems. Prevailing practices, however, continue to deemphasize assessment of such positive attributes.

**Definition.** To avoid the limitations and conceptual baggage associated with medically related language, the term assessment increasingly has been adopted. Formally defined, assessment is the process by which attributes of phenomena are described and judged. Descriptions take the form of data gathered by formal and informal measures, such as tests and observations of behavior or settings. Judgments take the form of interpretive conclusions about the meaning of data, such as whether a phenomenon is good or bad, above or below standard, pathological or not.

In practice, the overall aim of assessment is to describe and make judgments as an aid to decision making. The judgments may represent a conclusion about the past (such as what caused a problem), a statement about the present (such as how severe a problem is), or a prediction about the future (such as how much the problem will improve as a result of intervention).

**Functions.** As seen in Figure 3-3, we have grouped the major purposes of psychoeducational assessment into four categories of function. These four functions represent the types of decisions for which such assessment may be useful.

1. **Identification.** Data are used to help find and label phenomena of interest. The focus may be on a person, the environment, or both, and may or may not be on problems.

2. **Selection.** Data are used to help make decisions about general changes in status. These usually are discussed as placement decisions, but they also encompass decisions about changes in environments. Specifically, these are decisions about the general nature and form of needed intervention (for example, educational, psychological, or medically oriented treatments; placement in a special setting; changes in the organization of a classroom or school).

3. **Planning for specific change.** Data are used to decide about immediate and short-term objectives and procedures for accomplishing long-term goals. Examples are specific plans or prescriptions for any given day's intervention.
4. **Evaluation of intervention.** Data are used to decide intervention effectiveness based on positive and negative outcomes. Decisions may be made with reference to the impact on (a) particular persons or environments or both, (b) all experiencing a specific intervention, or (c) society as a whole.

In addition to the labeling related to identification, categorization of phenomena (that is, assignment of a classification label) may occur as a byproduct of any of the other three assessment functions.

An example may help clarify the preceding points. Achievement tests are often used to assess reading performance in a given school. The number of right and wrong answers provides a description of performance on a given set of items at a
given time. Based on these descriptive data, a variety of judgments are likely to be made. They will be based on available norms and prevailing standards.

Different judgments will be made about individuals with identical scores who differ in age. Different judgments may be made about groups living in economically advantaged and disadvantaged communities.

Decisions will be made about whether to assign diagnostic labels to individuals and programs judged to be performing poorly. That is, an individual might be labeled as having a learning disability; a school could be labeled as failing to do its job.

Decisions will be made as to whether some individuals and schools should be helped, and if so, specific plans may be formulated. At a later date, achievement test data again will be used to evaluate performance.

As the example indicates, the same form of data may be used for

- **identification** (for example, finding and labeling individuals and programs),
- **selection** (for example, deciding whether an individual needs special services, or whether a class, school, or district should consider different approaches to instruction),
- **planning for specific changes** (for example, deciding what a given individual should be taught and what specific approach to instruction should be adopted),
- **evaluation** (for example, deciding whether an individual’s progress and a school’s reading program are adequate).

Choices about what data to gather and what to exclude are guided by the types of judgments and decisions to be made. For instance, as the above example stresses, there are a variety of practical and policy decisions for which assessment
data may be helpful. Given the nature and scope of such decisions, it is well to remember that assessment can shape a life as surely as any other form of intervention.

**Contrasting Orientations to Remediation**

Approaches to remedying learning problems in general, and learning disabilities in particular, have been described extensively in books and journals. At first glance, the variety of teaching models, strategies, and techniques appears overwhelming. One hears about diagnostic-prescriptive teaching, direct instruction, precision teaching, clinical and remedial teaching, behavior modification, metacognitive and learning strategies approaches, pedagogical and psychotherapeutic approaches, and so forth. Despite the variety, approaches to remediation can be grouped into two general and contrasting orientations—underlying versus observable problem approaches (see Table 3-1).

**Underlying problems.** This orientation is based on the assumption that most learning problems are symptoms of an underlying problem. For example, cognitive deficits or emotional distress often are identified as underlying learning problems. In the case of learning disabilities, the underlying problem is seen as biological, namely a minor CNS dysfunction. The underlying CNS dysfunction is seen as interfering with processes (for example, short-term memory, selective attention) required to learn effectively and efficiently. As discussed in Chapter 2, over time this state of affairs is seen as affecting development (slowing it down or producing developmental anomalies). In turn, this interferes with acquiring certain prerequisites (for example, visual and auditory perceptual discriminations) needed for learning to read, write, and so forth. Failure to acquire these prerequisites impedes subsequent learning and performance.

As outlined in Table 3-1, those who pursue an underlying problem orientation to learning problems (including learning disabilities) attempt to address a range of motivational and developmental differences and disabilities that disrupt learning. When underlying problems appear resistant to remediation, individuals are taught ways to compensate for a specific disability.

Although the primary overall concern is with underlying problems, classroom programs also provide instruction to teach students age-appropriate school and life skills (especially readiness skills). Strategies also are designed to minimize behavior that interferes with classroom instruction.

The roots of this orientation are found in medical, psychotherapeutic, and educational concepts. Thus, the resulting corrective interventions usually are built on diagnostic testing designed to analyze perceptual, motoric, cognitive, language, and social-emotional functioning, with informal assessment of motivation. In addition, for purposes of diagnosis, neurological or psychoneurological testing may be done. Intervention objectives are stated in nonbehavioral as well as behavioral and criterion-referenced terms. Instructional strategies are eclectic, drawing on psychotherapeutic principles and a variety of teaching models. Thus intervention emphasizes rapport building to reduce anxiety and increase positive
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<th>PRIMARY OVERALL CONCERN</th>
<th>Underlying Problem Approaches</th>
<th>Observable Problem Approaches</th>
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<td>Motivational and developmental differences and disabilities that disrupt learning</td>
<td>Age-appropriate unlearned skills</td>
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**SPECIFIC AREAS OF CONCERN**

- Motivation
  - reactive motivation problems
  - proactive motivation problems
- Development
  - perceptual problems
  - motoric problems
  - cognitive problems
  - language problems
  - social problems
  - emotional problems
- Compensatory strategies for overcoming areas of continuing disability

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<th>SECONDARY CONCERN</th>
<th>Enhancing intrinsic motivation</th>
<th>Interfering behaviors (e.g., poor impulse control, lack of sustained attention)</th>
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<td>Age-appropriate skills (i.e., school/life knowledge and skills)</td>
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<th>TERTIARY CONCERN</th>
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<td>Construct-oriented assessment of developmental and motivational functioning for program planning and evaluation</td>
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<td>School curriculum-based assessment of sequential skills for program planning, monitoring, and evaluation</td>
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**FORM OF OBJECTIVES**

- Nonbehavioral, as well as behavioral and criterion-referenced objectives
- Behavioral and criterion-referenced (observable) objectives

**REMEDIAL RATIONALE AND METHODS**

- Therapeutic-oriented with eclectic instruction (primary emphasis on establishing rapport through interpersonal dynamics and use of a variety of teaching models)
  - counseling and psychotherapy
  - expanded options/choices for learning
  - minimized coercion
  - enhanced interpersonal options
  - accommodation of a wide range of motivational and developmental differences
  - exercises intended to correct developmental anomalies and accelerate lagging development
  - eclectic instruction related to age-appropriate unlearned skills
  - eclectic instruction related to compensatory strategies
  - eclectic strategies for reducing interfering behaviors

- Behavior change interventions (primary emphasis on establishing control over behavior through manipulation of reinforcers and instruction in cognitive self-direction and monitoring)
  - direct instruction to teach missing skills
  - behavior management to reduce interfering behaviors
involvement, traditional learning principles (for example, mastery learning, reinforcement theory), contemporary views of cognitive strategy instruction, use of social interaction, and so forth.

**Observable problems.** As outlined in Table 3-1, a contrasting view sees no value in assuming an underlying problem. Instead, this view assumes that individuals with learning problems simply haven’t yet learned the skills they need. Those who hold this view stress a primary concern with age-appropriate, unlearned skills and with the use of direct instruction to teach observable skills.

For instance, based on a student’s grade and age, proponents of this approach focus assessment on knowledge and skills through analyses of the school curriculum and daily life tasks. Upon identifying missing skills, criterion-referenced (behavioral) objectives are formulated. In classrooms, intervention also is designed to deal with behavior that interferes with classroom instruction. Strategies emphasize direct and systematic teaching and behavior management drawing on behavior change principles.

The roots of this orientation are in behavior and cognitive behavior-modification concepts. Thus, direct behavior change strategies are stressed (for example, eliciting and reinforcing specific responses, and instruction in cognitive self-direction and monitoring).

As applied in the classroom, both orientations have had to contend with the fact that a significant number of students with learning problems also manifest motivational and behavior problems that interfere with remedial efforts. It is not uncommon for such students to be inattentive and argumentative. In adopting strategies for classroom management, even those who are concerned with underlying problems have tended to use behavior change strategies (for example, manipulating reinforcement contingencies) to control interfering behavior.

**Adding general learning strategies.** Because neither remedial orientation has been particularly effective over the long run, there has been a trend on the part of proponents of both to evolve their strategies to include contemporary cognitive concepts and methods. This has given rise to a major emphasis on general learning strategies. This added focus involves teaching strategic and efficient strategies for learning and remembering. Proponents of the prevailing orientations have adapted this approach to fit their own views. That is, among those with an underlying problem orientation, some see learning strategies as another group of underlying abilities that may require remediation. Others see teaching such strategies as a way for an individual to compensate for an area of dysfunction. Advocates of direct instruction view the strategies as another set of skills the learner already should have learned and needs to be taught.

**Eclecticism**

Increasingly, when asked their orientation, professionals in education and psychology seem to be answering, “I am eclectic.”
Eclecticism can be a very healthy thing, especially when related to learning problems, where there is so much to learn that interveners cannot afford to be dogmatic. But eclecticism takes many forms. We distinguish three:

1. **Naive eclecticism.** There is a tendency among practitioners simply to keep their eyes open for every new idea that pops up. If it appeals to them, they adopt it with little concern for whether it is valid or consistent with other practices they use. It is this casual and undiscriminating approach that stimulates fads and results in the negative reaction against eclecticism.

2. **Applied eclecticism.** After years of practice, professionals find that certain practices don’t work and should be avoided, and some are useful in certain situations but not others. They also come to identify a large number of procedures that fit their philosophy and orientation.

3. **Scholarly eclecticism.** Through systematic theoretical and philosophical analyses and research, some professionals evolve a set of procedures that is comprehensive, integrated, and consistent.

Experienced practitioners who pursue “clinical teaching,” for example, tend to be eclectic. **Clinical teaching** is a term used to describe the day-by-day process followed by most remedial teachers. The process can be diagrammed as follows:

The evaluation provides much of the assessment data for planning the next session. The evaluation findings are supplemented with additional assessment if necessary, and the cycle continues. It is not the cycle alone that makes experienced remedial teachers eclectic, however; it is the fact that they have acquired at least an applied, and sometimes a scholarly, understanding of what is likely to work or not work with a specific individual.

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**Least Intervention Needed**

In making general decisions about intervention, most professionals would agree that the least needed is preferable (Kanfer & Goldstein, 1990). For example, if a youngster can be helped effectively in the regular classroom by the regular
teacher, putting the individual in a special education program is unnecessary and undesirable.

The principle of "least intervention needed" and the related idea of placement in the "least restrictive environment" provide a guideline for those who prescribe intervention. The guideline can be stated as follows:

Do not disrupt or restrict a person's opportunity for a normal range of experiences more than is absolutely necessary.

The guideline recognizes that very disruptive or restrictive interventions tend to narrow an individual's immediate and future options. The negative results can include poor self-concept, social alienation, and loss of career or other life opportunities.

Four topics are particularly germane in thinking about providing the least intervention needed.

1. Should an individual in need of help be kept in the mainstream or placed in a special setting?
2. Is diagnostic labeling necessary?
3. Is the least restrictive environment (LRE) always the best way to meet the individual's needs?
4. Can regular education meet the needs of all learners?

**Mainstream versus Special Settings**

Special classrooms tend to segregate "handicapped" persons from others. For this reason, the law in the United States requires placement in the "least restrictive environment" for all students with disabilities, including those diagnosed as having learning disabilities. This is to ensure that they are educated in a regular environment along with students who do not have disabilities and in the school they would regularly attend—unless there is a compelling educational reason for not doing so. The idea that such students should be educated as much as possible with students who do not have disabilities is called mainstreaming (sometimes referred to as inclusive education). The point is to keep students in the mainstream of public education rather than segregating them in special classes or institutions.

As a placement aid, lists have been formulated that describe a continuum of placements ranging from least to most restrictive (see Figure 3-4). Obviously the least restrictive "placement" is to keep people in regular situations, using special assistance only as needed. Thus a decision to place a student in a special class is somewhat more restrictive than keeping the individual in a regular class, and full-day placement in a special class is even more restrictive. The most restrictive placement would be assignment to a special school or institution. By law, in the United States, schools must have a continuum of alternative placements for students with disabilities.

The ideas of least intervention needed and placement in the least restrictive environment are rooted in "the principle of normalization" (Bank-Mikkelsen, 1968, 1976; Wolfensberger, 1972). This principle raises concerns over labeling and
supports mainstreaming and deinstitutionalization. In the United States, such ideas also are consistent with the Regular Education Initiative (REI), or General Education Initiative (GEI).

The General Education Initiative, and earlier calls for noncategorical programming, arose as a reaction to the proliferation of separate educational programs for each special education group (learning disabilities, mental retardation, emotional disturbance). The various attempts to revamp special education have underscored deficiencies and negative consequences of current practices and policies. For example, critics suggest that current procedures lack reliability and validity, fail to distinguish specific treatment needs appropriately, lead to a fragmentation of services and professional training, and result in a "bounty hunter" mentality (Hobbs, 1975a, 1975b, 1980; Jenkins, Pious, & Peterson, 1988; Morsink, Thomas, & Smith-Davis, 1987; Reynolds, Wang, & Walberg, 1987). These criticisms are bolstered by the view that current forms of special programming produce insufficient benefits to warrant special placements (Gartner & Lipsky, 1987; Glass, 1983; Jenkins et al., 1988; Leinhardt & Pallay, 1982; Slavin, Madden, Karweit, et al., 1991; Stainback & Stainback, 1984).

Opponents of fundamental efforts to revamp special education warn that too much normalization will lead to inequities (Fuchs & Fuchs, 1988; Kauffman, 1989). Specifically, they argue that many students will suffer whenever regular teachers lack the skills and time required to deal effectively with the diversity of educational needs in their classrooms. In addition, they stress that support for special education will be jeopardized because the general public, elected officials, policymakers, judges, administrators, and so forth will not appreciate special individual needs. To bolster their argument, they point out that just such negative consequences arose in England and Wales when disability categories were abolished (Fenlak, 1988).

**Labeling: Is It Necessary?**

Assignment of a label such as *learning disabilities* plays a major role in decisions to treat individuals specially. As a result, diagnostic labels have been a target of
criticism (National Association of School Psychologists, 1986). In addition to the above concerns, such labeling has played a key role in segregating children with physical, cognitive, social, and emotional differences—including a disproportionate number from minority groups (Copeland, 1983; Heller, Holtzman, & Messick, 1982; MacMillan, Hendricks, & Watkins, 1988).

From a transactional perspective, present labeling practices are criticized for presuming that most learning and behavior problems are caused by pathology within the individual (Hobbs, 1975a). This perspective downplays the possibility that many individuals assigned special education labels have problems initially caused (and perhaps maintained) by environmental factors. And, systematically downplaying the environment’s role keeps intervention narrowly focused on individual change (that is, strategies to increase coping and adaptation by individuals). Whether intended or not, this results in deemphasizing interventions designed to alter environments and systems so they can accommodate a wide range of individual differences.

It should be stressed, however, that not all critics of current diagnostic practices are against labeling in some form (Wang & Walberg, 1988). Many want to replace current categories with a system that identifies special individual needs (1) only as such needs become relevant to providing an appropriate education and (2) through a process and terminology that have direct relevance to intervention and that minimize negative consequences (for example, Type I, II, and III learning problems).

Given the scope of concerns, dissatisfaction with current labels and diagnostic procedures is quite understandable and appropriate. Calls for improvement in classification and identification systems certainly are warranted and timely. Calls for eliminating all classification and identification, however, are premature. We hasten to add that to argue for classification is not to argue for tying all forms of special help to formal diagnoses. Classification is essential to scientific research and basic to efforts to improve interventions.

**Needs Come First**

There has been much support for the idea of using the least intervention and for descriptions of least restrictive placements. There are, however, some problems. For instance, the least restrictive setting may be the most restrictive in the long run if it cannot meet the needs of the individual.

Take the case of Joel and his friend Jesse. In sixth grade, they were in the same class, and both were behind in their reading. It was decided to keep them in a regular sixth-grade classroom and provide special tutoring in class for an hour a day. Joel has a learning disability and is reading at no better than the second-grade level; Jesse has no disability and is reading at the fifth-grade level. Both respond reasonably well to the tutoring. Jesse also begins to perform satisfactorily during other times of the day. Joel continues to have trouble learning at other times, and he also tends to be a behavior problem. While the intervention plan keeps both students in the mainstream, someone is bound to ask,
Does Joel need to be placed in a special class?

Might it be better to place Joel temporarily in a special classroom that can be more responsive to his educational needs so that he can overcome his problems and then return to the mainstream?

The argument continues,

After all, isn’t it much less restrictive in the long run to get intensive treatment so the problem can be overcome as quickly as possible? In so many cases, what might seem like the less restrictive approach may mean added years of involvement in special treatments, and the results may not even be as good.

Opponents of special class placements would answer,

Those are good points, but the evidence suggests that special classrooms are not particularly effective.

And, they say,

Some never do get to go back to mainstream programs after being placed in special schools and institutions.

Placement decisions clearly are difficult!

It is assumed that placement will be in the least restrictive, but also most effective, environment. A short stay in a more restrictive placement may be more effective than a long stay in a minimally restrictive, but less effective, program. In general, the relatively small number of individuals with severe problems are the most likely candidates for the more restrictive placements.
Besides the least restrictive environment guideline, financial support and program availability can be major factors in deciding school placements. Indeed, there is a trend toward approaching educational placements as an administrative rather than a remedial arrangement. For example, efforts to return students from special schools and classes to regular programs (mainstreaming) generally have not been paired with improvements in the ability of regular programs to serve the special needs of such students. Thus, students have been shifted from one setting to another without significant attention to whether the new setting contains adequate resources for appropriate remediation.

One final note about placement in special settings: It is widely recognized that all decisions to place individuals in special settings need regular review to detect placement errors and to determine how effective remediation is.

**Regular and Special Education**

Clearly, the matter of least intervention needed goes right to the roots of the difference between regular and special education. One way to look at the difference is to see regular education classes as trying to serve as wide a range of people as they can. Those people whom regular educators cannot serve appropriately need special education in some form (see McCann, Semmel, & Nevin, 1985). The less the regular education program can do, the more the need for special education. The unanswered questions are:

- What range of individual differences can regular education programs serve under **optimal conditions**?
- What range of individual differences can regular education programs serve under **typical conditions**?

Most regular programs probably could handle a greater range of individuals than they do. To do so, however, some changes in these programs are needed. For those who argue that mainstreaming can work well for many exceptional students, a basic assumption is that most regular classroom programs must be changed before they can be successful with such students. These changes include additional materials, equipment, and procedures, and some training for the teacher in how to use them.

Changes also are recommended in staffing and support patterns and staff–student ratios, so that a teacher has more time to devote to those with special needs. Examples of these changes are team teaching and the addition of aides or tutors (including peer tutors). The right pattern and ratio certainly will vary depending on the number of students with special needs and severe problems. In addition, there is likely to be a call periodically for consultation and specialist help in and out of the classroom (for example, resource teachers—reading and speech specialists to assess student problems and clarify needs). Finally, it may still be necessary for certain students (those with Type III learning problems) to have some special help outside their classroom daily.
If regular classrooms are not changed, the potential value of mainstreaming cannot be fairly tested. The longer regular classrooms stay as they are, the more call there will be for placements in special education programs.

No Magic Bullets

Medical researchers warn that it is a mistake to think about medication as if it worked like a magic bullet. They say many people tend to think that, once administered, a drug speeds directly to its target and cures the problem. Medication is imagined to disappear upon entering the body and to reappear magically at its goal where it performs its work and again disappears. This belief fosters a tendency to ignore such facts as: (1) drugs can cause damage as they go through the body, and (2) drugs don’t necessarily stop having effects as soon as they have done the work they are intended to do (Lennard, Epstein, Bernstein, & Ransom, 1970).

We all dream of miracle cures, but most of us recognize that quick and easy treatments for difficult problems are rare. Still, when we are involved, the hope for a miracle is strong. This makes us a bit too receptive to those claiming to have an effective answer and a bit too ready to ignore possible harmful effects of treatments (see Feature 3-1).

There are no magic bullets in remedying learning problems. All approaches can do harm as well as good.

It’s customary to speak of the unwanted consequences arising from treatment as “negative side effects.” This term makes it sound as if the harmful effects are inconsequential. Negative consequences indeed may be trivial, but they also may be life-shaping—physically, psychologically, economically, and socially.

Commonly discussed potential negative consequences of assessing and correcting learning problems include:

- invasion of privacy
- errors of identification
- stigmatization
- segregation and social isolation
- limitation of current and future opportunities
- overdependence on others
- creation of self-fulfilling prophecies
- burdensome financial costs

Ethical practitioners, of course, try to minimize negative consequences and try to ensure that benefits outweigh harm. Controversy arises when there is a disagreement about whether a given negative consequence should be tolerated at all and whether benefits outweigh harm.

Harmful effects have a way of coming back to haunt professionals. Professionals who downplay negative consequences of intervention and professions that allow the public to become overdependent on them may be pleased with the response at first. However, there often is a backlash when the public becomes
disappointed and disenchanted because of the repeated failure of the professionals to live up to their expert images. Such backlash is seen in the increasing malpractice suits in medicine and psychology and in the demands for accountability and excellence in education.

**Feature 3-1 On Harmful Effects**

When treatments are suggested for bothersome problems that have no proven cure, most of us are tempted to try them. This is especially so when the treatment is intuitively appealing and advocated by someone who seems to have expertise. The attitude "What harm can it do?" operates whenever possible harm is not obvious or well publicized.

Use of diets and megavitamins for those diagnosed with learning disabilities and attention deficits and hyperactivity seem to many people to have no potential harmful effects. Indeed, advocates of such treatments tend to claim this is so.

Concerned physicians, however, raise cautions (Sieben, 1977; Silver, 1987). Sieben stresses special diets may cause

- a person to feel different from others;
- family conflict when parents must insist that a child follow the diet;
- elimination of foods that have positive effects (for example, antioxidant preservatives that may inhibit carcinogens);
- a person to use failure to follow the diet as an excuse for ongoing problems; or
- other, potentially more effective actions to be ignored.

Megavitamins may cause

- edema (watery swelling) of the brain (large doses of vitamin A),
- kidney stones (mass doses of vitamin C), or
- liver damage (vitamin B6 and niacinic acid).

Neither the positive nor harmful effects of diets and megavitamins have been studied adequately. Without appropriate evidence, the concerns remain simply concerns, just as the promises remain simply promises.

Even treatments with fairly well-publicized harmful effects may produce additional unexpected negative outcomes. For example, those who prescribe stimulant medication usually point out possible side effects such as appetite loss, sleeplessness, irritability, and retardation of physical growth. However, most are unlikely to warn of a potential relationship to Tourette's syndrome. This hereditary syndrome is characterized by multiple repetitive tics and uncontrollable verbalizations that often, but not always, include cursing (Bronheim, 1991). In 1983, a report was published in *The Journal of the American Medical Association* on research done at Yale University suggesting that about 15 percent of children with Tourette's might not have developed the syndrome if stimulant drugs had not been used to treat hyperactivity and attention problems. The implication is that those with a family history of Tourette's may be particularly at risk when stimulant medication is prescribed. Further study is needed, but the point is clear.

Besides surprising harmful effects, some consequences are so subtle and pervasive that they creep into our lives without our awareness. Critics of institutionalized professional activity such as Ivan Illich, R. D. Laing, Irving Goffman, and Thomas Szasz have warned about such hidden consequences. For example, society's way of thinking about learning problems is shaped subtly by professional activity. The public is led to think about individual differences (quirks) as problems; problems are thought of as disorders within people rather than as trouble with the way society functions. Such thinking leads to treatments focused on changing people rather than institutions and to overreliance on medical, psychological, and educational professionals for answers (Illich, 1976).
Summing Up

David's parents have been confronted with a dilemma. David seems to need special help to succeed at school. There are decisions to be made: some by the family, some by those who provide special help.

One set of options involves deciding about services, places where remediation and treatment will be carried out, and who should carry out the options. The choice may be to pursue special education services in or out of special classrooms and schools; medically related and psychotherapeutic treatments also may be chosen. In all cases, decisions are guided by the idea of using the least intervention needed. But David's parents find this is not an easy guideline to use.

The other set of decisions involves the form that help should take each day. For example, two contrasting remedial orientations have dominated programming. Each orientation is based on different assumptions about what must be done to help students like David.

It should be clear by now that contemporary remedial and treatment approaches can be complex and controversial. Because assessment plays such a major role in all this, Chapter 4 offers a more detailed discussion of the multiple facets of assessment, highlighting prevailing approaches, concerns, and new directions.

Take a few minutes to think about your own views regarding intervention.

1. If you had a problem requiring a psychologist or a medical doctor, would you want her or him to follow the principle of least intervention needed?
2. Would you want the psychologist to have an underlying or observable problem orientation?
3. What about the M.D.? What type of orientation should he or she have?
Remedying Learning Disabilities: Prevailing Approaches (p. 314) explores major approaches to remedying learning disabilities from contrasting orientations:

1. Underlying problem approaches are discussed in terms of their focus on
   - perception
   - motor functioning
   - language
   - general cognitive functioning

2. Observable problem approaches are discussed in terms of their focus on
   - observable skills and objectives
   - direct instruction

   Controversial Treatments and Fads (p. 309) contains some interventions specifically developed for Type III problems (learning disabilities) that are controversial. The discussion briefly reviews the following:
   - optometric vision training
   - Irlen’s colored lenses
   - stimulant medication (such as Ritalin)
   - special diet
   - megavitamin therapy
   - CNS training
   - vestibular treatment

Ethical Concerns About Negative Effects (p. 391) points out that potential negative effects are facts of life for practitioners. The dilemmas are difficult and complex, and there are no easy answers. However, there are some concepts and principles that can help. We have outlined three topics:

   - balancing costs versus benefits
   - understanding the complexity of fairness
   - applying the concept of informed consent