
Differentiated Instruction for Students With Learning Disabilities

Strategies Included in This Chapter:

- ✓ Differentiated Instruction and Classroom Organization
- ✓ Cubing
- ✓ The Bender Classroom Structure Questionnaire
- ✓ Ten Tactics to Foster Attention Skills
- ✓ Ten Tactics for Structuring the Lesson

Students with learning disabilities (LD) have a way of challenging almost every general education teacher because of the learning characteristics that are displayed by many kids with learning disabilities. As every veteran teacher realizes, students with learning disabilities may be less engaged in the learning task, unable to cope with multiple instructions, and poorly organized in their thinking and work habits. When these deficits are coupled with fairly severe academic deficits, the result can be a student who is very challenging for general education teachers. In my workshops nationally, I've found that teachers are hungry for tactics and ideas that work for these challenging students.

The concept of *differentiated instruction* is based on the need for general education teachers to differentiate instruction to meet the needs of diverse learners in the general education class; this includes students with learning disabilities as well as a number of other disabilities.

Differentiated instruction may be conceptualized as a teacher's response to the diverse learning needs of a student (Tomlinson, 1999, 2001). Teachers must know the learners in the class, understanding not only such things about each learner as the learning style and learning preferences but also showing a concern for each student by tailoring instruction to meet the needs of each individual student. Given the teacher's professional observations of a student's learning, the teacher would concentrate on modifying (i.e., differentiating) the learning in three areas:

- *Content* (what is learned)
- *Process* (how the content is taught)
- *Product* (how the learning is observed and evaluated)

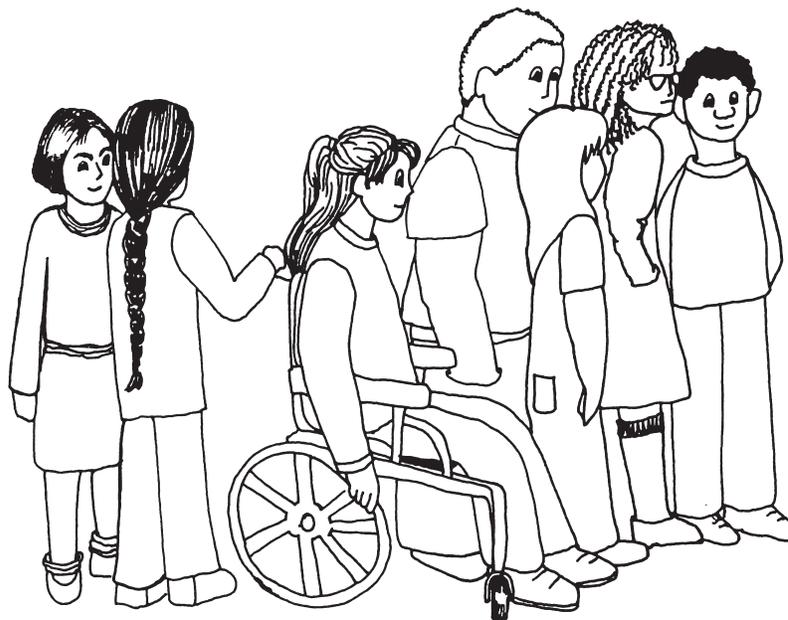
The concept of differentiated instruction is based on the need for teachers to differentiate instruction to meet the needs of diverse learners in the general education class.

The learning *content* involves what students are to master, what we want the students to accomplish after instruction (Tomlinson, 1999, pp. 1-65; Tomlinson et al., 2002, p. 46). The content may be delineated in state-approved curricula, in scope and sequence charts (i.e., objectives grouped by subject area and grade level), in state or national standards, or in the curriculum material itself. In most cases, the teacher will not be able to control the

specific content that must be covered, but he or she will have control over how to modify that content for presentation to the students based on the learning styles of the students, and in that modification process, some content will be emphasized more than other material (Tomlinson, 1999).

The learning *process* involves how the student interacts with the content, and those learning interactions will in part be determined by the various learning preferences of the students (e.g., is this student an auditory learner, a visual learner, a learner who needs concrete demonstrations, etc.). Because of the diversity of learning styles and preferences demonstrated by students today, the differentiated classroom will typically involve a wide array of activities to address the different learning needs of everyone (Gregory & Chapman, 2002, pp. 9-17; Tomlinson et al., 2002, pp. 46-59). These learning processes may include some of the following:

1. *Activating the learning*—the introductory activities that focus on the material to be learned, relate that material to previously mastered material, let the student know why that material is important, and describe what students should be able to do once they learn.



Different learning needs require differentiated instruction.

2. *Learning activities*—involve the actual instructional activities for the students, such as modeling, rehearsal, choral chanting, movement associated with the content, and/or educational games.
3. *Grouping activities*—both individual and group-oriented learning activities should be planned as a part of the learning process.

Finally, the learning *product* will be of paramount importance because demonstrations of learning allow the teacher to determine the students who have mastered the material and those who may need more time and continued instruction (Tomlinson, 1999, pp. 1-65). Again, the learning styles of the students in the class will help determine what types of products the teacher may wish to accept as demonstrations of learning (Gregory & Chapman, 2002, p. 20). In the differentiated learning classroom, it would not be uncommon for a given unit of instruction to have four or five different types of culminating projects that students may choose in order to demonstrate their knowledge of the topic. Art projects, role-play mini-dramas for groups of students, library or Web-based research, multimedia projects, paper-and-pencil projects, written reports, or oral reports all represent excellent projects that students may complete to demonstrate their knowledge. This assessment component is discussed more completely in Chapter 6.

Using this model of differentiated instruction, the teacher will constantly modify his or her classroom organization, curriculum, instructional methods, and assessment procedures to address the individual learning needs of the students in the class (Gregory & Chapman, 2002, pp. 1-37; Tomlinson, 1999). Furthermore, the teacher's relationship with and knowledge of the students in the class will be the basis for the differentiations in instruction, and so the relationship between the teacher and the pupil is critical. Only a solid positive relationship and fairly complete knowledge of the student's learning styles and preferences can provide an effective basis for differentiated instruction.

As an example of the type of differentiated instructional modification that typifies the differentiated classroom, several authors have suggested the idea of *cubing* (Cowan & Cowan, 1980; Gregory & Chapman, 2002; Tomlinson, 2001). Cubing is a technique that will assist students to consider a concept from six points of view, by giving students suggestions on how to conceptualize a particular concept. While envisioning the six sides of a cube, the student is told that each side represents a different way of looking at the idea (as presented by Gregory & Chapman, 2002, pp. 1-15).

<i>Cube Sides</i>	<i>Function</i>	<i>Use Terms Like</i>
Side one	Describe it	recall, name, locate, list
Side two	Compare it	contrast, example, explain, write
Side three	Associate it	connect, make design
Side four	Analyze it	review, discuss, diagram
Side five	Apply it	propose, suggest, prescribe
Side six	Argue for/against it	debate, formulate, support

Using this idea of cubing, the same concept is looked at from six different perspectives, and the various levels of knowledge of different students may be addressed in this context (e.g., some students consider initial descriptions of the concept, whereas others are involved in analysis of it). In the differentiated classroom, the teacher will intentionally construct his or her lessons based on this cubing concept, and that will emphasize to the students that concepts covered in this fashion are multidimensional and must be considered in a more complex fashion. In studies of President Kennedy's and President Johnson's response to North Vietnam's and China's growing influence in the nation of South Vietnam, the various sides of the cube would suggest that students should do the following:

Describe that response	Buildup of U.S. troops in Vietnam
Compare the response	To French buildup of troops fifteen years earlier
Associate the response	To other presidents' attempts to limit power of other nations in other regions (e.g., President Wilson's response to Germany in 1916)
Analyze the response	Discuss the reasoning of Presidents Kennedy and Johnson
Apply alternatives	Suggest how other presidents chose to limit influence at other times (e.g., the Jefferson administration's response to pirates around the African coast)
Argue the response	Debate the wisdom of Kennedy's and Johnson's response

In using this cubing concept, the lessons will be differentially aimed at one or more aspects of the cube, and students will be exposed to instruction based on a broad array of activities (Gregory & Chapman, 2002, pp. 1-56). Thus, the differentiated classroom is founded on a variety of lesson formats, learning processes, and products that are developed by the students.

In many ways, this entire text is founded on the concept of differentiated instruction and places a priority on the content modifications, instructional differentiation, and setting variations that allow the teacher to meet the needs of students with learning disabilities as well as the other diverse learners in today's classrooms. Although subsequent chapters focus on instructional modifications of content and assessment, this chapter focuses on the setting for differentiated instruction by asking, What type of class structure does a teacher establish? A moment's reflection reveals that how a teacher structures and operates his or her class will initially determine how much differentiation of instruction is possible. Consequently, in this and subsequent chapters, the three components of differentiated instruction noted above will be addressed as a backdrop or foundation for the various teaching strategies described.

TEACHING AS A REFLECTIVE PROCESS

Teaching is at its best a highly reflective process, in which professionals engage in dialogue with themselves and others about strategies that work well and strategies that do not. Such a dialogue can be critical for instruction of students with learning disabilities. Another emphasis throughout this text will be an emphasis on this reflective process.



Well-structured lessons prevent boredom.

Teachers will be encouraged to engage in various reflective exercises to focus on the strategies provided and how those strategies may be adapted for various classroom situations. Initially, we will consider the structure of the classroom.

Most beginning general education teachers adopt a structure, organization, and instructional style for their class that is similar to the structure used by their cooperating teacher in their student teaching experience. These teachers arrange their desks in a similar fashion to their cooperating teacher, and many find that they teach in a similar fashion. Of course, this often allows a beginning teacher to implement a class structure that is appropriate and effective because most cooperating teachers are selected because they are believed to be effective teachers. In fact, most beginning teachers do not specifically reflect on their overall classroom organization until one or two years after they begin their career.

However, veteran teachers—teachers with two or more years' successful experience—tend to engage in a reflective process related to structuring their classroom and often improve on their room organization as well as their instructional technique. This reflection can be critical in dealing with students with learning disabilities because both instructional and disciplinary endeavors must begin with intentional structuring of the classroom to maximize effective instruction and minimize

disruption. Students with learning disabilities do tend to function much more effectively in a highly structured environment, perhaps because disorganization tends to be one general characteristic of this group of students. Thus, regardless of whether the organizational issue deals with desk arrangement in the class or with the most effective method to study a particular section of the text, highly structured classes and assignments tend to facilitate learning among students with learning disabilities. When contemplating the instruction for students with learning disabilities, a teacher's first emphasis should be a general reflection and reconfiguration of the instructional space and instructional approaches to more easily differentiate the instruction in the class and thus accommodate the needs of students with learning disabilities in the differentiated classroom.

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What Is Classroom Structure?

In helping teachers reflect on their classroom structure, the first issue concerns definition; what is classroom structure? Is it merely how desks are arranged, or does it also involve how assignments are structured and delivered, or perhaps how students spend their time? In my work, I have found it more effective to use an expanded definition of classroom structure. Of course, the first level of classroom structure involves how one organizes one's classroom furniture and equipment, and some consideration must be given to placement of desks, arrangement of computers, and so on. However, classroom structure in the differentiated classroom also involves several other levels of structure, such as how a teacher, as the instructional leader, structures the time of the students, as well as how the specific assignments are structured. High levels of organization within specific assignments will tend to result in better performance from students with learning disabilities, and this chapter, as well as several other chapters in this text, will include suggestions for specific structuring of assignments. Teaching Tip 1.1 provides some additional thoughts on the components of classroom structure.

Self-Evaluation of Classroom Structure

Perhaps one way to get an understanding of how one structures one's classroom is to use an informal self-evaluation and look critically at the structural components of the class. Approximately twelve years ago, I saw the need for teachers to reflectively consider their class



Teaching Tip 1.1

What Is Classroom Structure?

For our purposes in this text, classroom structure means the following:

- The arrangement of furniture
- The establishment of learning centers
- The arrangement of instructional computers and other devices
- The instructional grouping patterns for students
- The orchestration of students' learning time
- The structure of communication between teacher and students, as facilitated or restricted by elements of classroom organization
- The structure of the content of the lessons, the learning processes, and the instructional activities aimed at increasing the variety of learning activities

structure and, within that context, a variety of instructional techniques for students with learning disabilities. As a result, I developed the Bender Classroom Structure Questionnaire (BCSQ) (Bender, 1986, 1992; Bender, Smith, & Frank, 1988). The indicators on the BCSQ were specifically selected to represent the types of instructional practices that encourage differentiated instruction and have been shown to facilitate effective inclusion of students with learning disabilities (Bender, 1986, 1992). This questionnaire has now been used in a variety of subsequent research investigations on how both special and general education teachers structure their classroom (Bender & Beckoff, 1989; Bender et al., 1988; Bender & Ukeje, 1989; Bender, Vail, & Scott, 1995). As a first reflective exercise, teachers may wish to use this form and evaluate their classroom structure and differentiated instruction practices. The questionnaire is presented in Teaching Tip 1.2.



REFLECTIVE EXERCISE: EVALUATION OF MY CLASS

Using the BCSQ, determine the number of instructional indicators that represent instructional tactics used at least once each week in your class. Consider which techniques you would like to use more frequently, and note some ideas on how you may implement those ideas this week.



Teaching Tip 1.2

The Bender Classroom Structure Questionnaire

Name _____ Date _____

This self-evaluation rating is designed to measure various aspects of instructional environments in order to assist in making useful instructional improvements. It will take about fifteen minutes to complete. Please fill in each blank below, then rate your classroom on each question on the 5-point scale ranging from *only rarely* (i.e., less than once a month) to *almost always* (almost every day).

How many years have you taught school? _____

In what areas are you certified to teach? _____

How many years have you taught students with disabilities? _____

What is your current teaching assignment? _____

How many courses specifically on teaching students with disabilities have you completed? _____

How many students with learning disabilities are in your class currently (during any one period)? _____

How many students total are in that class? _____

	Only Rarely	2	3	4	Almost Always
1. I keep the lesson moving along quickly	1	2	3	4	5
2. The class reviews assignments when I return them	1	2	3	4	5
3. Several students may be walking around in my class at any one time retrieving materials	1	2	3	4	5
4. Students receive verbal praise from each other	1	2	3	4	5
5. I encourage students to share various techniques that may help them memorize facts in class	1	2	3	4	5
6. The class emphasizes correction of worksheets	1	2	3	4	5
7. Students must raise their hand before standing	1	2	3	4	5
8. I ask, "How did you learn that?" or some other question to focus on learning strategies	1	2	3	4	5
9. I insist that doors be shut and students remain in their seats to minimize distractions	1	2	3	4	5
10. New material is introduced fairly rapidly	1	2	3	4	5

(Continued)



Teaching Tip 1.2 (Continued)

11. I suggest particular methods of remembering	1	2	3	4	5
12. Peer tutoring is used to assist slower learners	1	2	3	4	5
13. I emphasize the importance of working quietly	1	2	3	4	5
14. I determine early in the year if a student needs the same concepts covered in different ways	1	2	3	4	5
15. I use physical touch, such as a pat on the back, as a reinforcer	1	2	3	4	5
16. I praise students for successful work whenever possible	1	2	3	4	5
17. Students are encouraged to help each other informally on learning tasks	1	2	3	4	5
18. I try to determine how students learn best	1	2	3	4	5
19. I use reading materials that highlight the topic sentence and main idea for slower learners	1	2	3	4	5
20. I individualize in my class when necessary	1	2	3	4	5
21. Students are taught to use their own inner language to give themselves silent task instructions	1	2	3	4	5
22. I use class privileges as rewards for work	1	2	3	4	5
23. I use a specialized grading system that rewards effort for pupils with disabilities	1	2	3	4	5
24. I use several test administration options such as oral tests or extended time tests	1	2	3	4	5
25. Directions for educational tasks are kept simple and are demonstrated to achieve clarity	1	2	3	4	5
26. Differential curriculum materials are selected based on the learning characteristics of particular students	1	2	3	4	5
27. I routinely vary the instructional level for different ability children doing the same task	1	2	3	4	5
28. Instructional materials are varied for different students	1	2	3	4	5
29. I constantly monitor the on-task behavior of my students	1	2	3	4	5
30. I individualize my class for low-ability students	1	2	3	4	5
31. Visual displays and transparencies are used in class to aid comprehension	1	2	3	4	5

(Continued)



Teaching Tip 1.2 (Continued)

32. Students use self-monitoring to record daily academic and behavioral progress	1	2	3	4	5
33. A token economy is used for reinforcement	1	2	3	4	5
34. I use the dry-erase board frequently to explain concepts	1	2	3	4	5
35. I have an assertive discipline plan in effect	1	2	3	4	5
36. Cooperative learning groups are frequently used	1	2	3	4	5
37. I use individual behavioral contracts with students to improve behavior	1	2	3	4	5
38. I use advance organizers to assist students in comprehension of difficult concepts	1	2	3	4	5
39. Students complete direct daily measures of progress in class	1	2	3	4	5
40. A set of class rules is on display in my class	1	2	3	4	5

Scoring the BCSQ

Scoring the BCSQ may be done either formally or informally. Because these techniques generally represent “best practices,” a higher score on the BCSQ is more desirable and indicates that a teacher is employing the instructional techniques that should facilitate successful inclusion. To get a general score, one may merely total the circled score for each indicator, resulting in a score that ranges from 40 (the lowest possible score) to 200.

Bender (1992) reported that a group of 127 general education teachers in Georgia (from Grades 1 through 8) generated a total score of 143 ($SD = 19$) on this questionnaire. A group of 50 teachers from New Jersey (Grades 3 through 12) generated a score of 139 ($SD = 19$) on this scale. These general scores may provide some indication of how you provide varied instruction for students with learning disabilities in your class.

SOURCE: From “The Bender Classroom Structure Questionnaire: A Tool for Placement Decisions and Evaluation of Mainstream Learning Environments” by Bender, W. N. (1992). *Intervention in School and Clinic*, 27, 307-312. © 1992 by PRO-ED, Inc. Used with permission.

Use of this questionnaire will give teachers an initial sense of how well and how frequently they may be implementing various tactics and strategies that have been proven successful for students with learning disabilities in the inclusive general education class. Of course, no one would be expected to implement all of these differentiated instruction practices at any given time or in any one specific period. Still, students will be more successful in classrooms where a variety of these approaches are frequently implemented, and this tool will provide the caring, thoughtful teacher with one mechanism that can foster reflective thought on how one teaches. On the basis of this informal self-evaluation, we may now consider the various components of classroom structure.

INSTRUCTIONAL GROUPING FOR EFFECTIVE INSTRUCTION

In inclusive classes, teachers frequently teach eighteen, twenty-two, or twenty-eight students during each lesson, and to individualize the learning in any form, teachers many years ago began to form instructional groups within the class. Of course, differentiated instruction is based, in part, on effective grouping of students, as has been discussed in the educational literature. There are a variety of options available to general education teachers for structuring instructional groups (Gregory & Chapman, 2002, pp. 57-79). However, many teachers believe that the large numbers of students in the typical inclusive class necessitate whole-group instruction. In fact, this single teaching mode accounts for the largest percentage of the instructional time even in today's classrooms (Elbaum, Moody, Vaughn, Schumm, & Hughes, 2000). However, within the past decade, there has been some debate about the effectiveness of whole-class lecture/discussion as an instructional model, and research has suggested that small-group, teacher-led instruction may be a more effective instructional procedure for students with and without disabilities (Elbaum et al., 2000). Clearly, the general education classrooms should be structured to facilitate, as much as possible, various small-group instructional arrangements.

As an alternative grouping arrangement, research has also supported the use of students to tutor each other (Mortweet, Utley, Walker, Dawson, Delquadri, Reddy, Greenwood, Hamilton, et al., 1999; see also the subsequent chapter on peer tutoring). Even when students with special needs are involved in the tutoring, the research has been generally supportive. This is why a number of indicators on the BCSQ deal with varying the instructional group arrangement rather than always using a whole-group, teacher-led discussion. In fact, the differentiated classroom is characterized by a variety of instructional grouping patterns.

Recently, in many general education classes, the older instructional model of lecture/whole-group discussion seems to be giving way to more appropriate models of instruction that will benefit students with learning disabilities in their academic efforts, and classes that offer a variety of instructional grouping options will tend to be more successful for students with learning disabilities. However, there is still a place for whole-group instruction in the inclusive class. Activities such as morning exercises, simulation games, sharing time, multimedia instruction, class presentations, or social skills instruction seem to be activities that would be most effective as whole-group activities. Furthermore, these whole-group activities would require a space in the class—an area that allows all of the students to attend to the teacher at the same time. Consequently, any class will need to be physically arranged to accommodate a variety of instructional activities, including whole-group activities; teacher-led, small-group instruction; peer tutoring; and individual learning opportunities. These classroom arrangements will facilitate the teacher's ability to differentiate instruction.

Students will be more successful in classrooms where a variety of instructional approaches are frequently implemented.



REFLECTIVE EXERCISE: HOW DO I TEACH?

1. What percentage of the time in my classroom do students spend listening to me deliver content?
2. What percentage of the time in my classroom are students engaged in group work on projects with their peers?
3. What percentage of the time in my classroom are students engaged in individual inquiry?
4. What percentage of time in my classroom are students engaged in producing products resulting from their learning?

A Recommended Room Arrangement Model

Considerations of room organization for both inclusive general education and special education classes must be guided by concerns about the need to differentiate instruction, the types of activities planned, the number of students in the class, and the behavioral or academic problems demonstrated by those students. Both inclusive general education classes and special education classes, although involving different numbers of desks, may still be arranged based on a few straightforward considerations. Many of these classroom-structuring suggestions have been

identified over the years (Hewett, 1967; Wang & Birch, 1984; Wang & Zollers, 1990), and the discussions below reflect these classroom-structuring guidelines.

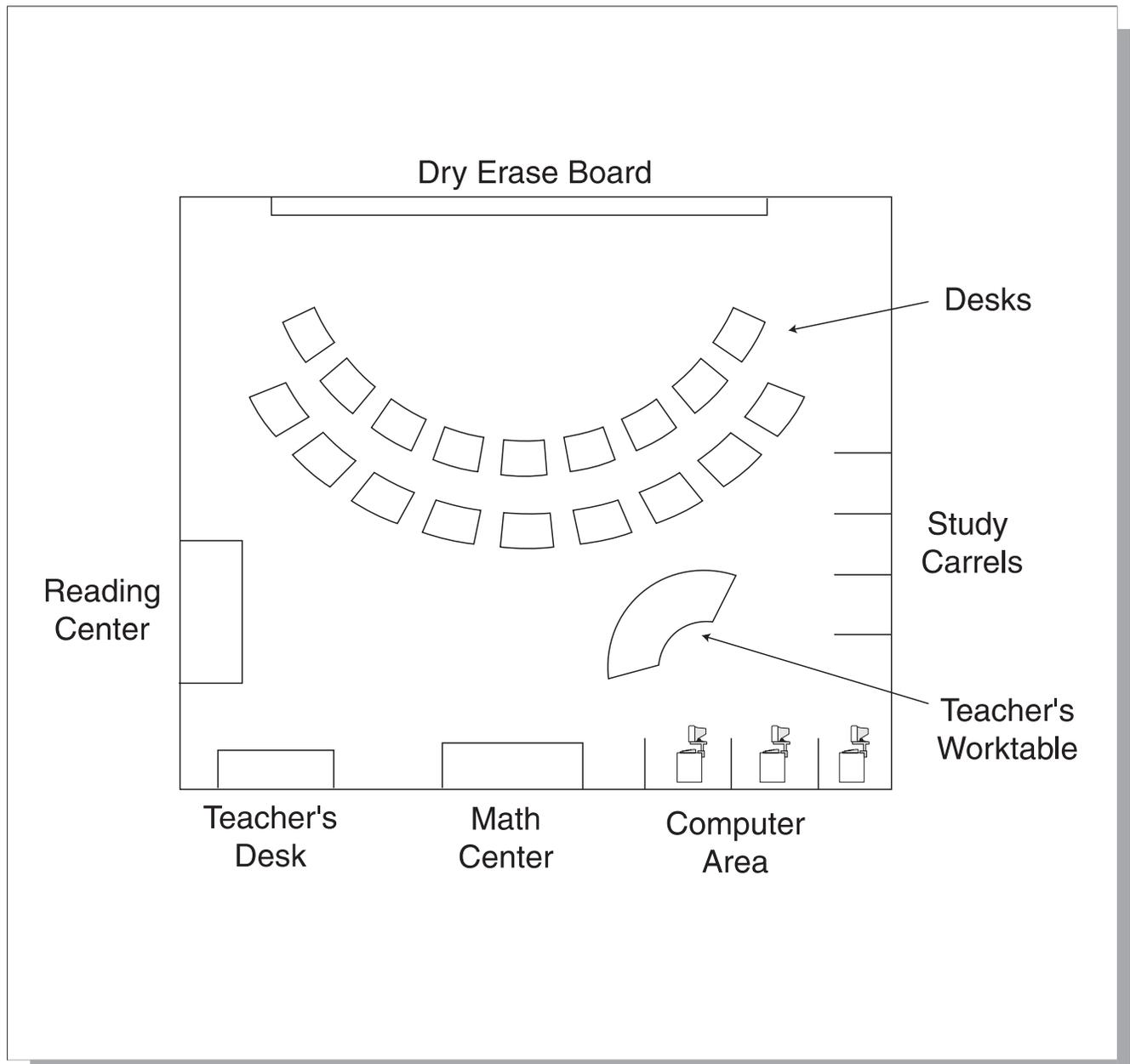
In an ideal classroom, space would be used to allow for varying instructional tasks at the same time. Although not every classroom has optimum space, Figure 1.1 presents an initial suggestion for arrangement of desks, learning centers, study carrels, computers, and so on in a general education classroom to facilitate differentiated instruction.

This suggested room arrangement includes areas for large- and small-group instruction, as well as individual seatwork, computer-assisted multimedia instruction, and work in study carrels. Perhaps the most notable feature is the semicircular desk arrangement. In this arrangement, students with challenging behaviors should be seated near the teacher, but not together, because they would model inappropriate behaviors for each other! Furthermore, using this arrangement, the teacher can more easily monitor students' behavior visually. Specifically, the teacher can visually monitor each student's work while assisting a particular child; he or she should merely remain outside or behind the semicircle. This arrangement allows the teacher to face almost all members of the class almost all of the time (even when leaning over a student's shoulder to assist on a particular assignment). This ease of visual monitoring will tend to improve behavior and assist students with learning disabilities in the class. A similar semicircular arrangement is also appropriate for special education classes, which generally include smaller numbers of students.

Again, to facilitate differentiated instruction for students with learning disabilities, a teacher must physically arrange his or her classroom to allow for instructional variations, and a variety of instructional areas will be necessary. These typically include various learning centers, a teacher's worktable, and a group work/social skills area. These areas will, of course, vary according to grade level, but differentiated instruction will make higher levels of success for students with learning disabilities more likely. Below are brief descriptions of the various instructional areas that may be appropriate in your class.

Learning Centers

Learning Center Structure. Learning centers should be included to allow for modifications and adaptability of instruction within the classroom context in almost every classroom because the activities and information in the learning center can provide one way to address the diverse needs of a wide variety of learners, including students with learning disabilities (Gregory & Chapman, 2002, pp. 105-110). For the elementary education classroom, learning centers in both reading/language arts and math would seem to be a minimum. Other teachers, depending on

Figure 1.1. General Education Room Diagram

their class grade level and teaching responsibilities, also include a center for science, social science, and/or other subject areas.

For secondary subject area teachers, various centers may be adapted for the subject content. Many history and/or social studies classes, as one example, may include versions of the following learning centers:

Daily Living Center
 Commerce Center
 Political Center

Government Center
 International Relations
 Timeline Art Center

As these examples suggest, in content areas (e.g., in this case, history) in departmentalized schools, the learning centers should be based on general concepts or issues within the topic that are not particular to a given unit of study. Thus, in the history centers mentioned above, the teacher would place materials in these centers that were appropriate for the various historical periods and/or different units of study, and although those materials may change when studies of one period conclude and another historical period begin, the learning center names and orientations remain constant throughout the year.

A semicircular desk arrangement allows the teacher to face almost all members of the class almost all of the time.

Learning Center Materials. The materials that should be included in each learning center should be obtained on a continuous basis and subsequently labeled and organized in a way to facilitate the student's retrieval of appropriate materials. Students with learning disabilities should be taught how to obtain their own work materials from the learning center because this will assist them in the development of organiza-

tion skills as well as an ability to focus on the specific task at hand. Thus, the learning centers must be a model of efficient organization of materials.

Initially, in establishing a learning center, the teacher should inventory the class and the school's media center to get some idea of the educational materials already available. These may include books, charts or wall posters, bulletin board kits, computer software, educational games, manipulatives, and game boards for multiple uses. Most teachers develop sets of worksheets that may be used, either individually or by small groups of students, and place these worksheets in the learning centers as well. Remember, teachers should seek out the media specialist and inquire whether materials are available for long- or short-term loan to a particular class. In many cases, with special permission, the teacher may be able to check out materials for use for a week, a multiweek instructional unit, or a month. Teachers will also want some materials for lower level readers to use. This will enable almost all students to obtain assignments from the learning center.

In each learning center, teachers should provide some instructions for the students working there. Many teachers post "activity cards" on the wall in each learning center that instruct the students on the activities that must be accomplished to receive credit for completing the work in

that center. To make these learning centers accessible for students with learning disabilities, teachers should keep the instructions for these activities simple and clear. Also, classes may have various levels of assignments present on these activity cards and instruct some students to complete the “Level 1” activities while others complete “Level 2” or “Level 3” activities. Again, such differentiated instruction must be provided to meet the needs of students with learning disabilities or other diverse learning needs.

Teacher’s Worktable and Desk

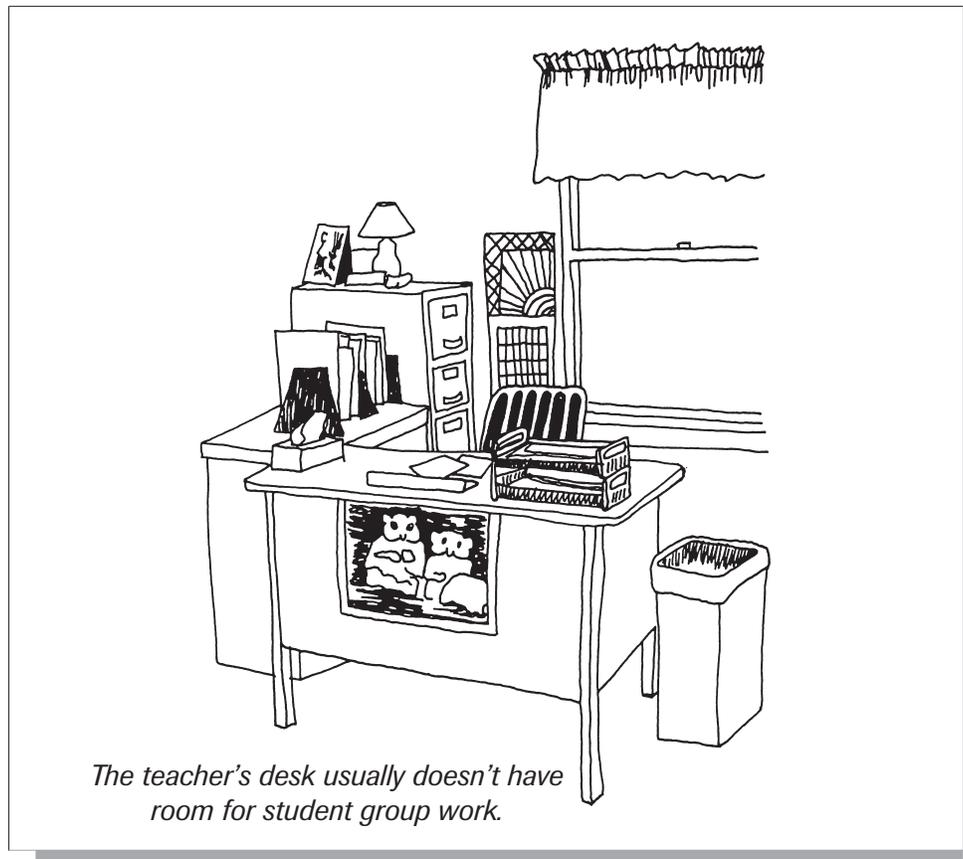
The teacher should have a worktable located such that the teacher can scan the entire room while working with one student or a small group of students at a time. This will greatly facilitate the teacher’s use of small-group, teacher-led instruction, as the recent literature recommends. Although this requires that the worktable be located somewhere at the front of the room, it does not have to be the focal point within the front area. As long as the teacher has easy visual contact with all members of the class, any location toward the front of the class will do.

I generally recommend that teachers not use the teacher’s desk as the worktable. The desk is typically used for writing assignments and grading papers at the end of the day, along with bookkeeping matters, such as lunch money collection and attendance records. Consequently, desks tend to be cluttered with a lot of non-instructional material—some of which may be confidential—and if students are working with a teacher on that desk, the opportunities for misbehavior are multiplied. In contrast, the worktable can be kept clear of everything except the instructional materials in use for the students working there. Also, with a worktable somewhere in front of the class (to ease the teacher’s visual monitoring of students), the teacher’s desk may be located at any place in the room.

Students with learning disabilities should be taught how to obtain their own work materials from the learning center because this will assist them in the development of organization skills as well as an ability to focus on the specific task at hand.

Group Instruction Area

Many social activities, such as sharing time, group games, or class projects, require or may best be facilitated by a group instruction area. In inclusive classes, this area may, of necessity, be the student’s desk area because twenty-five or thirty desks do tend to fill up a room. However, in some smaller classes, the students may complete group projects on the floor in a nonfurnished, carpeted corner of the classroom. These group



instruction areas generally include some nearby shelves for storage. A screen for viewing films together may also be placed here.

Computer/Multimedia Instruction Area

The use of computers and/or multimedia instruction (e.g., a language master that reads words) has increased rather dramatically in recent years. One would be hard-pressed to find a modern classroom without some multimedia equipment that facilitates learning. In fact, this provides teachers today with a critically important tool for offering differentiated instruction to students with learning disabilities, as well as other learners with special needs. In most general education classrooms, computers will typically be located along the wall, and the electrical outlets may determine where these are placed. In consideration of disciplinary issues for students with learning disabilities, the teacher should make certain that there is ample room between these instructional tools such that distractible and/or aggressive students cannot find too many opportunities for misbehavior. Generally, these should be located in study carrels that are designed for computers and prevent one student from observing another's work.

Study Carrels

Study carrels are essential in classes that include students with learning disabilities because these students may be easily distracted by movement in the class. Generally, several study carrels can be lined up along one wall and may be used for individual seatwork for certain children. In some cases, the students feel better about using these areas if they are labeled an “office.” If the class includes a student who is reluctant to work in a study carrel but would benefit from it, the teacher can create a “private office” environment for him or her, merely by labeling a study carrel. One important fact to remember is that if a student with a learning disability needs a place to work that is free of visual distraction, one must be provided to assist the student to remain task oriented.

In addition to limiting the visual distractions that may be present in the work area, teachers should note that many students with learning disabilities are quite disturbed by auditory distraction. Consequently, soft music played continuously in class becomes a type of background noise and may facilitate higher work output from those students. However, one person’s relaxation music is another person’s distraction. In some instances, teachers may wish to provide soft music through earphones to only one or two students. Regardless, teachers must be careful of the effects of such music on all of the students in the class.

DIFFERENTIATED INSTRUCTION FOR STUDENTS WITH LEARNING DISABILITIES

As indicated previously, this entire text may be considered as a set of ideas for differentiated instruction, and each subsequent chapter presents specific instructional tactics for varying the instruction in the general education classroom. However, in addition to the class-structuring guidelines presented earlier and the ideas in the subsequent chapters, some general teaching tips for differentiating instruction can be offered as initial guidelines for teachers when challenged by students with learning disabilities.

First, the general structure of most classrooms can be greatly enhanced and can be specifically designed to facilitate active engagement by students with learning disabilities by following just a few simple guidelines. Ten tactics for fostering higher levels of attention are presented in Teaching Tip 1.3.

Next, consideration must be given to structuring lessons and developing alternative lessons for students with learning disabilities. Teaching Tip 1.4 presents ten tactics, described originally by Mathes and Bender (1997b), that can guide inclusive teachers in structuring lessons for students with learning disabilities.



Teaching Tip 1.3

Ten Tactics to Foster Attention Skills

1. *Use a highly structured class.* In talking with students and giving instructions in the class, teachers should clearly differentiate between the “floor groupwork area” and the study carrel area. This will help students with learning disabilities understand your vision of the types of work to be done in each area, and higher structure will assist students with learning disabilities in their work overall.
2. *Display classroom rules.* Having a set of three to five positively stated class rules on display can alleviate many behavior problems. Rules that state what a child should do (i.e., quietly complete your work) are usually best, and by referring to the rules when a student is misbehaving, the teacher can, in effect, differentiate himself or herself from the discipline process and make the misbehavior an infraction against the class (i.e., against the rules of the class).
3. *Post a daily class schedule.* Even for teachers in departmentalized schools with forty-five-minute periods, a posted schedule of the day’s activities can greatly assist students with learning disabilities in understanding what they should be doing.
4. *Train on class cues.* Teachers should train students to recognize certain cues in the context of the classroom. Depending on the age level, some teachers have a small bell that they ring to get the attention of the class. Others use cue cards that are mounted in front of the class about how to begin a lesson (get out the book, get out your notebook, get out your pencil, etc.). As the cue, the teacher may merely need to point to the chart.
5. *Use two desks.* Hyperactive students frequently get out of their seat without knowing why. For some students, assigning a second desk across the room gives them the ability to move from one to the other periodically (not every five seconds, of course!) without the teaching having to attend to an “out-of-seat” misbehavior.
6. *Use intentional distractions.* For some students with learning disabilities, movement is not only necessary—it is essential. For many of these students, providing them something to do with their hands may alleviate more disruptive movements in the class. This is the concept of “intentional distractions.” In short, providing a child with a pen from which he or she can constantly remove and replace the cap provides something to stay busy with during a class discussion (and is usually much quieter than loud pencil tapping on the desk). For pencil tappers, teachers should demonstrate “quiet tapping” (which is tapping on the back of one’s own hand). It provides more sensation/stimulation and is quieter than tapping on the desk!
7. *Keep desks clear.* Remind students to keep their desks clear and uncluttered, except for materials and texts used at the moment.
8. *Visually monitor students.* The teacher should arrange the class to allow for visually monitoring the students at all times. Provide verbal reminders to return to task, as needed.

(Continued)



Teaching Tip 1.3 (Continued)

9. *Provide color organizers.* Colored organizers can assist many students in organizing their assignments and notebooks. The teacher should work out a color-coded organization system appropriate for the students.
10. *Use peer buddies.* Setting up a peer buddy system in which pairs of students check each other's readiness to begin the next lesson can greatly assist students with learning disabilities in getting through transitions between lessons.



Teaching Tip 1.4

Ten Tactics for Structuring the Lesson for Students with Learning Disabilities

Differentiated instruction focuses on the three components of content, process, and product. The tactics presented here offer teachers an array of possibilities to differentiate both the content and the process of instruction.

1. *Provide clear directions.* Providing clear, simple, instructions, particularly during transitions, can assist students with learning disabilities to focus on the learning task.
2. *Provide lesson outline.* A lesson outline will help students focus on what will come next in the small-group or whole-class discussion. From the basis of this outline, the teacher should teach outlining and note-taking skills. This assists students with the learning process.
3. *Develop alternative activities.* To modify the instructional content, when a teacher develops a lesson, he or she should develop a minimum of two worksheets that present the same content at different levels. The use of alternative assignments that cover the same material is one cornerstone of differentiated instruction.
4. *Plan for frequent breaks.* Students who are hyperactive (including many students with learning disabilities) will need frequent opportunities to stand up and move around the classroom. Building thirty-second "stretch-breaks" every fifteen minutes or so into your class period can help alleviate many problems.
5. *Use physical activities.* For all students in public schools, learning is facilitated by movement. Even the learning of the highest achievers in senior high can be enhanced by movement. The emerging research on "brain-compatible education" has documented that the learning process can be greatly enhanced by movement, and if

(Continued)



Teaching Tip 1.4 (Continued)

teachers can tie particular facts to a physical movement and have the class practice that movement, the students with learning disabilities will be much more likely to remember that fact. While some teachers feel that this type of movement-based instruction may be appropriate only in lower grades, a moment's reflection on the popular song/movement combination "YMCA" will indicate that even adults prefer learning associated with movement.

6. *Use clear worksheets.* Teachers should make certain that they do not unintentionally build distractors into the lesson by using cluttered worksheets or instructional materials. For students with learning disabilities who may be visually distracted, such worksheets can result in failure on the assignment.
7. *Decrease task length.* For some students with learning disabilities, a worksheet activity that involves fifty math problems will always appear to be an insurmountable assignment. However, if the teacher prints only fifteen math problems on the worksheet, the student will immediately attempt that assignment. The teacher may then give another worksheet with another fifteen additional problems on it.
8. *Check assignment notebook.* All teachers should require that students write assignments in a notebook, and while many do this, some teachers never check the notebooks. For students with learning disabilities, checking that they have written down the correct assignment can be critical, and the process of checking emphasizes the importance of noting the assignment due dates.
9. *Develop alternative assessments.* Looking at the product of student learning is a critical component of differentiated instruction, and students with learning disabilities, on some occasions, know more about a topic than a paper-and-pencil test can allow them to demonstrate. Teachers must develop and use alternative assessment practices, such as grading open-book homework or class work or using daily databased performance measures. These will be covered in a later section of this text.
10. *Turn to your partner and explain.* The idea behind "turn to your partner and explain this concept" is rooted in the truth that what one can explain, one understands. When conducting a lesson, at various points (perhaps every five minutes or so, when the class finishes a certain amount of material), teachers may have the students pair up and explain those several points to each other, as a comprehension check. Building this routine into the lesson can greatly enhance comprehension of students with learning disabilities.



REFLECTIVE EXERCISE: USING DIFFERENTIATED INSTRUCTION

To better understand the overall construct of differentiated instruction, use the list of ten indicators in Teaching Tip 1.4 and

identify each instructional modification as either a modification of content, process, or product. Then consider which of these tactics you are currently using in your own class.

What's Next?

With the various options in mind for differentiated instruction, as well as the suggestions above for organization of the classroom, the next chapter will focus more directly on differentiated instruction by varying the instructional process, as dictated by the individual needs of the learner. In particular, a brief synopsis of the information from the brain-compatible literature is presented, along with several strategies that encourage students to take personal responsibility for their learning.