

Arranging Activities Within a Lesson In whole-group instruction, lessons usually consist of a series of activities. A common activity sequence in basic skill areas is this:

1. Checking or recitation
2. Content development
3. Classwork
4. Independent work, group work, or discussion

The first activity allows the previous day's assignment or homework to be corrected. If there was no homework, the teacher leads a review of prior content important for the day's lesson. During content development, new content or skills are taught. Following this, a short classwork activity is used to review the new content and to preview the new assignment. Then practice is provided through independent work, group work, or discussion.

The problem with this sequence is that it requires that the presentation of lesson content and the practice period be handled in two, usually lengthy, segments. A variation of the sequence that accommodates more complex content and that does not demand as much sustained attention is this:

1. Checking or recitation
2. Content development
3. Classwork or independent work, usually brief, with checking
4. Content development
5. Classwork, usually brief
6. Independent work, group work, or discussion

This sequence allows you to divide the lesson content into two parts, with practice and feedback following both content development activities. Teaching new content in two parts with an intervening practice period helps students consolidate learning from the first part before they are asked to address new learning required in the second part. This sequence also allows you to check student understanding and to provide prompt feedback before moving on to more complex content. Furthermore, when individual activities are divided into shorter segments, student attention is usually easier to maintain. A challenge with this sequence is that it produces more transition points and thus greater potential for student disengagement. However, these transitions often can be managed without difficulty because student movement, new materials, or greatly changed lesson focus is not required. The various activities blend together, usually without conspicuous transitions.

Of course, not all whole group lessons fit either of the activity patterns just described. For instance, a science or social studies lesson may consist of a relatively long period of active student exploration or problem solving in small groups, followed by a whole-class content development discussion. Ongoing projects may entail long segments of individual seatwork or small-group work interspersed with short segments of whole-class or small-group instruction. Nevertheless, the two common patterns described here provide useful frameworks for building most teacher-directed lessons.

Feedback Feedback can be provided during discussion, recitation, or checking, and can occur before, during, or after content development. For example, in presenting new material, you may build on prior knowledge, and you might want to begin with a group discussion that leads to a new idea or problem to be solved. In addition, feedback is involved in student presentations, checking student work, demonstrations, and testing. Wherever these feedback activities occur in the instructional sequence, planning and management can make them more productive.

Feedback is an important component in the learning process when it is given in ways that connect students' present understandings with their learning goals (Hattie, 2012; Timperley, 2013).

Teacher-Led Small-Group Instruction. In this format, students are grouped together for instruction. In a teacher-led small group, the teacher works with small groups of students, one group at a time, while the rest of the class works independently. This mode of instruction is most commonly used for reading and frequently for mathematics. Its purpose is to accommodate a wide range of achievement levels in basic skill subjects. Because this format is used so extensively for basic skills, we will describe its features in detail.

A critical aspect of small-group instruction is that at least two different activities occur simultaneously. The teacher leads one group while students outside the group participate in a variety of independent activities. Because the teacher is actively involved with the small group, it is more difficult to monitor the behavior of other students and give them assistance. And because students may work independently for a long period, careful planning and extra effort are required to keep them involved in their work.

To set up effective small-group instruction, you must first plan for the out-of-group activities. You will need to give directions to the whole class at once: instructions for each assignment, a description of needed materials, and a suggested time for completing each activity. This list of assignments and timeline should also be posted, written on the board, or projected on a screen. Check whether students understand the directions by asking students in each group to repeat them before beginning.

Before calling the first group, monitor the beginning of independent work for a short time. After you are certain that students have started, signal the first group. During your work with the small group, monitor out-of-group students by scanning the room frequently. If you observe inappropriate behavior that is interfering with work, try to stop it with eye contact or some nonverbal signal, by calling the student's name once, or by reminding the student of what he or she should be doing. A "time-out" desk near you can also be used for persistent misbehavior: You can signal such a student to go to the desk for a while, without your having to leave the group.

Another consideration is how students needing help on an independent task can obtain it without interrupting you. Some teachers tell students to skip work they cannot do and go on to another activity until you are available. Others allow students to help each other, or they assign a few students (perhaps one for each table or group) the role of helper. This works best if students are seated in mixed-ability groups. Finally, students can sign up on the board or on a clipboard sheet to indicate the

need for assistance when it is available. If you must leave the small group to help a student or to deal with a problem, be sure to give students in the group something to do. One student in the group may be able to lead the activity for a short time.

When work with one small group has been completed, delay calling the next group. Take the opportunity to check the progress of the students who will be continuing individual assignments and help them with any problems they may have. Students who were off task while you were teaching the small group can be given delayed feedback at this time. Be sure to encourage and give positive feedback to students who are participating appropriately. The students who have left the small group and are moving to other activities should also be monitored to be sure they begin their work promptly. Then signal the next group to come for instruction.

Small groups are also used as an integral part of other teaching methods, such as cooperative learning, reciprocal teaching, and project-based learning. In cooperative learning activities (see Chapter 8), students work together to complete group and individual assignments. In reciprocal teaching, students take turns serving as small-group leaders during discussions of text material in order to practice summarizing, questioning, clarifying, and predicting. In project-based learning, students work in collaborative groups to develop solutions to “ill-structured” problems (i.e., problems having multiple possible solutions, unknown aspects, or requiring judgment and evaluation). Review Case Study 4.2 for considerations when planning group work.

Planning for Clear Instruction

When you have an idea of the range and sequence of activities available to you, examine the content, concepts, and goals of the lessons and units that you will be teaching. One way to start is to review the unit and lesson in the teacher’s edition of your textbook(s). Pay careful attention to suggestions for lesson development and activities. Study the exercises, questions, problems, and other activities in the textbook, and decide which items provide appropriate review of lesson objectives. Note examples, demonstrations, and key questions and activities to use in the development of the main concepts. Put yourself in the lesson. Try to anticipate problems students may encounter in the lesson or assignments. Check for new terms, and be ready to define them and present examples.

The textbook suggestions should not be limiting. Remember, you want your students to *understand* the content, not just retain it. Many educators talk about the importance of constructing knowledge, having students actively involved in making new information relevant to what they already know. This may be as simple as introducing a problem and exploring possible solutions or reframing a lesson through a thoughtful discussion of how it relates to individual experiences. You are targeting understanding, appreciation, and application.

Consider the interest the lesson is likely to have for students. Will you be enthusiastic about teaching this material to your class in this way? Your enthusiasm about the lesson is contagious and signals to students how you feel about its importance. If you find it interesting and exciting and you communicate this excitement to your class, students will probably respond with interest. However, if you

find yourself unenthusiastic about a lesson or topic, chances are your students will share your feelings. Consider approaching the lesson in a different way. For example, rather than giving a lecture presentation of material, perhaps you can find ways for students to contribute through large- or small-group discussions that address the same issues. To increase student motivation, also consider the resources listed in the Further Readings section on Universal Design for Learning (UDL).

Finally, organize your lesson parts into a coherent sequence. This organization will often be dictated by the learning goal or target set for students. Planning the lesson with this end goal in mind helps guide your instructional decision making as you plan, and, in turn, increases the likelihood your teaching accomplishes the intended goal (Wiggins & McTighe, 2005). Read further material on the planning process of Understanding by Design (UbD) in the Further Readings section. Outline the main components, and list any prompting/discussion questions. Then you will be well prepared for a clear lesson presentation.

Technology in the Classroom

Using technology—whether for content development, research, or practice—requires awareness and planning. Few classrooms have as many computers as teachers would like, but almost all have at least one. Develop strategies to make technology a productive tool in helping students reach their academic goals. Your school may have a computer lab, your classroom might include computer stations, and/or your class may have access to individual laptops or tablets. As noted in Chapter 6, each type of technology access requires procedures for its use. In addition, you may want to train one (or more) student “computer expert” who can assist quietly while you continue with whole- or small-group instruction. This responsibility can be rotated among students so that everyone has an opportunity to become an “expert” at different times. Parent volunteers may also provide helpful classroom assistance.

Having technology does not mean it is the appropriate tool for meeting a specific lesson’s objectives. When technology is the appropriate choice, making the best possible use of shared technology can be a challenge. Useful strategies include using the Internet for research or setting up specific content software to reinforce skills. Email and word-processing software may enable students to improve their organizational and writing skills. Spreadsheets may be useful for class exploration of math (e.g., charting data) or tabled content (e.g., recording novel components by chapter). You may want to include study notes on a class webpage, learning game links, and instructional links to engage your students. Additionally, you might plan to provide content visually through projected slides, present online video of an animal in its habitat, utilize clickers for an in-class assessment, or develop a wiki with another class on a specific country of study.

To teach effectively with technology in the classroom, teachers develop more defined “hypertextual function” (Schussler, Poole, Whitlock, & Evertson, 2007). In other words, they become more familiar with students, facile with technology, transparent in integrating students and technology with content, and connected across learning areas, and they have the necessary collegial support to maintain

these interconnections. Simultaneously, researchers highlight the need for teachers to be aware of the aggressive marketing focus of technology (in particular, the Internet) toward children and to be advocates for students maintaining their privacy while becoming informed consumers of information obtained online (Seiter, 2007). Consider who will be using the technology, for how long, and with whom.

Internet access in the classroom makes it possible for students to find information more easily than ever before. Unfortunately, not all of the information available to them is appropriate. Certain precautions must be taken when including Internet use in your lessons. Many school districts have developed fair use policies for the technology they provide that include required signatures of all staff agreeing to supervise student online access. Most districts utilize Internet filters. Some school systems also require that parents give written permission before their child is allowed on the Internet. The teacher must find alternative ways for students without that permission to gather information. Children should be cautioned not to give their last names or any personal information over the Internet.

Visit websites (or use software) in advance to know the expected screen displays and to anticipate any student difficulties. Monitor students frequently as they access information on the Web. By giving them specific information to find and a limited time in which to find it, you can avoid many hazards. It is a good idea to set up guidelines for use at the beginning of the year. For example, have the students sign a contract that states “I will use the Internet for school use only. If I knowingly search for inappropriate materials, I will lose the privilege of using the Internet for the remainder of the year.” To eliminate the argument that a site was accidentally found, teach students to click the “back” button on the browser and get your attention immediately if they access an inappropriate site by mistake.

To make more efficient use of browsing time while students search for information, you may want to encourage them to print the resources they find. Teach them to skim headings for appropriate material and print a specified section of text. Alternatively, consider having students use the Search or Find function to identify the main idea of a section and scan the surrounding text for details, teaching them to take notes during the search.

When technology use is planned outside the classroom (e.g., in the library, at the computer lab), prior arrangements need to be made with the supervising teacher in those locations if students travel there without you. Provide written directions for your students to assist the supervising teacher in answering questions and problem-solving with them as needed. Review any necessary procedures with students for their movement to and from these locations.

When you plan an activity that integrates technology with instruction, it's important to preview software, test equipment, and check Internet accessibility to avoid problems that can interfere with the activity's momentum. For example, if students need to Skype™ or connect to an online site, technical problems will cause slowdowns or stop the activity altogether. Having a backup assignment or alternate online sites would be possible, of course, but preventing the problem is the most desirable course.

When students' experience with some technology is limited, careful planning is needed for activities that make use of it. It's common for integrated activities to be

conducted by small groups of students at a center while you are working with other students elsewhere in the classroom. In such cases, directions should be provided ahead of the planned use; written or graphical directions or steps should also be available at the center in order to allow the groups to proceed without needing frequent guidance from the teacher.

Finally, as teachers, we must avoid allowing the immediacy of technology to interrupt the responsibility of teaching our students. Utilize your personal technology during your break times—even if it is ultimately for your students’ benefit (e.g., visiting Livebinders.com to locate lesson plans for a given topic). Surfing, texting, or talking on your cell phone during a lesson is not only a poor use of teaching time, but it also models lack of respect for your students, allows them to disengage with the content, and can encourage misbehavior to erupt. Checking the weather reports for potential storm warnings on a smartphone, utilizing an app to help randomize calling on a variety of students (e.g., Triptico), or texting the teacher of a student’s sibling regarding a change in pick-up rides can be legitimate activities—but not in place of teaching your students.

■ Kounin’s Concepts for Managing Whole-Group Instruction

A central theme in managing teacher-led activities well is the idea of activity flow—the degree to which a lesson proceeds smoothly, without digressions, diversions, or interruptions. Lessons with good flow maintain student attention and prevent deviation because most of the cues for behavior during the lesson are focused on behaviors appropriate for the lesson. When lesson flow is jerky, with frequent interruptions and side trips, there is more competition for attention from cues external to the focus of the lesson. Therefore, there will be a greater tendency for students to disengage.

A series of seminal classroom research studies by Kounin and his colleagues (Kounin, 1970; Kounin & Gump, 1974) identified several concepts that contribute to effective management of interactive group activities, leading to smooth activity flow. According to Kounin, activity flow is maintained through three types of teacher practices, summarized in Table 7.2. Within each class of behavior there are two or three related concepts. Look at how each is defined, and consider some examples.

Preventing Misbehavior

Classrooms are complex settings. Many events can occur at the same time. One cannot always predict with certainty what will occur when. New teachers run the risk of focusing too closely on single events or on select areas of the classroom and missing the big picture. Understanding two of Kounin’s (1970) concepts—withitness and overlapping—helps to prevent this mistake.

Withitness is the degree to which the teacher corrects misbehavior before it intensifies or spreads to more students and also targets the correct student when

table 7.2 ■ How Effective Managers Maintain Activity Flow

Issue	Skill	Definition	Example
Preventing misbehavior	Withitness	Communicating general awareness of the classroom to students; identifying and correcting misbehavior promptly and correctly	The teacher makes eye contact with a student who is about to “shoot a basket” with a wad of paper. The student puts the paper away. A student behind him, who has seen the interaction, decides he’s not likely to get away with shooting a basket either.
	Overlapping	Attending to two or more simultaneous events	The teacher is leading a class discussion when a student comes in late. The teacher nods to him, continuing the discussion. Later, when students have begun a seat-work assignment, she attends to him and signs his tardy slip.
Managing movement	Momentum	Keeping lessons moving briskly; planning carefully to avoid slowdowns	The teacher notices that the explanation of a relatively minor concept is taking too long and is distracting attention from the primary focus of the lesson. The teacher makes a mental note to go more in-depth on this concept in a separate lesson the next day and moves on.
	Smoothness	Staying on track with the lesson; avoiding digressions and divergences that can lead to confusion	While being responsive to student interests, the teacher avoids comments that tend to draw attention away from the key points of the lesson.
Maintaining group focus	Group alerting	Engaging the attention of the whole class while individuals are responding	Each student has a number that was drawn from a hat on the way into class. The teacher draws numbers and uses them to call on students during a fast-paced review.
	Encouraging accountability	Communicating to students that their participation will be observed and evaluated	At the end of discussion and practice of a new skill, students are told to turn to a neighbor and explain the process to him or her.
	Using high-participation formats	Using lessons that define the behavior of students when they are not directly answering a teacher’s question	While some students work problems at the board, students at their desks are instructed to check them by working the problems on paper.

doing so. A teacher who is not “withit” either will fail to stop the problem until it has escalated and may require a major intervention or else will fail to catch the perpetrator and may instead target the wrong student. It is apparent that underlying aspects of withitness include good monitoring and prompt handling of inappropriate behavior—concepts that are discussed in detail in Chapter 9.

Overlapping refers to how the teacher handles two or more simultaneous events. Here are some examples: A visitor comes to the door in the middle of a lesson, a child from outside the group comes up to the teacher during reading group time, or several students get into a squabble while the teacher is busy helping other children across the room. A teacher who has good overlapping skills will handle both events in some way instead of dropping one event to handle the other or else ignoring the second event. To handle an interruption, for example, a teacher might tell the class or group to continue working or to get out some work, and then may deal with the interrupter. The teacher handles the squabble by eye contact or a brief verbal directive while the teacher stays where he or she is.

Notice that a teacher who is withit and exhibits good overlapping skills is able to insulate lessons from the intrusions that student misbehavior or external interruptions might cause. Furthermore, by reacting promptly to problems (but not overreacting), the teacher is often able to use simple measures (e.g., eye contact, redirection, a quiet command) that do not interfere with ongoing activities or distract students very much. If a teacher is not withit or does not overlap when needed, lessons may be interrupted by student misbehavior and by the teacher’s subsequently more visible and tardy reactions.

Managing Movement

Whereas withitness and overlapping are accomplished by handling external interruptions and student intrusions into the flow of the lesson, movement management is accomplished by avoiding teacher-caused intrusions or delays. Good movement management is achieved through momentum and smoothness.



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Momentum refers to pacing and is indicated by lessons that move along briskly. Teachers can cause slowdowns in momentum by dwelling on individual parts of a lesson, direction, or skill or by unnecessarily breaking an activity into too many parts. For example, teachers should provide a standard heading for assignments that can be used routinely rather than altering its form and having to explain it over and over.

Smoothness, as opposed to jerkiness, is epitomized in lesson continuity. A smoothly flowing lesson keeps student attention. If a teacher leaves a topic or activity to explore a side topic or to retrieve materials not prepared in advance, students may be distracted and miss the point of the lesson.

Maintaining Group Focus

Classroom instruction involves teaching children in groups, often a whole class at a time. It is imperative that the teacher be aware of the group influence on the instruction. Like a conductor leading an orchestra, the teacher must elicit the performance of individuals and still provide signals and direction to the whole class. Group focus can be maintained through three techniques.

Group alerting means taking action to engage the attention of the whole class while an individual is responding. It can take the form of creating suspense, telling students they might be called on next, calling on students randomly, asking students not reciting to add to the answer, or using some new visual aid, display, or attention-getting strategy. Engaging in a dialogue with only one student to the exclusion of others and calling on students before asking questions are two examples of poor group alerting.

Accountability occurs when the teacher lets students know that their performance will be observed and evaluated in some manner. It does not require a letter grade or a score (although it might); it simply communicates some degree of awareness of how students are performing. For example, the teacher might ask everyone who knows an answer to raise a hand and then call on one or more of those students. The teacher could have all students write answers and circulate to check them. The teacher might also have students keep notebooks and check them from time to time.

High-participation formats are lessons that program the behavior of students when they are not directly involved in answering a teacher's question. Such lessons have a higher built-in rate of participation than do lessons that merely assume that students will sit and watch when other students respond. Higher-participation formats occur when students are expected to write answers, solve problems, read along, manipulate materials, or perform some other concurrent task.

Some activities lend themselves more to one type of group focus than another. When planning instruction, it is helpful to consider which of the three aspects to use. For example, during a demonstration that involves expensive materials, it might be difficult to use a high-participation format, but group alerting might be easy to incorporate.

Kounin's concepts for managing group instruction not only help identify key aspects of effective teaching, but they can also be used to diagnose instructional

problems and identify possible solutions. For example, if lessons seem to drag and student response is unenthusiastic, there may be a problem with group focus; a solution may be to work on alerting or accountability or to increase the degree of participation. Activities that take too long and that seem to get off track constantly may have a problem with movement management. Perhaps this teacher should check for slowdowns and jerkiness.

■ Transition Problems in Conducting Instruction

The interval between any two activities is a *transition*. Several management problems can occur during transitions, including long delays before starting the next activity, which can contribute to high levels of inappropriate or disruptive behavior. Transition problems can be caused by a lack of readiness by the teacher or the students for the next activity, unclear student expectations about appropriate behavior during transitions, and faulty procedures for transitions. Here are examples of transition problems, along with suggested ways of correcting them.

Transition Problem	Suggested Solution
Students talk loudly at the beginning of the day. The teacher is interrupted while checking attendance, and the start of content activities is delayed.	Establish a beginning-of-day routine, and clearly state your expectations for behavior at the beginning of the day, reinforcing consistently. Practice this starting transition with a timer to build swiftness.
Students talk too much during transitions, especially after an assignment has been given but before they have begun working on it. Many students do not start their work activity for several minutes.	Be sure students know what the assignment is. Post it where they can see it easily. Work as a whole class on the first several exercises so that all students begin the lesson successfully and at the same time. Watch what students do during the transition, and urge them along when needed.
Students who go for supplemental instruction stop work early and leave the room noisily while the rest of the class is working. When these students return to the room, they disturb others as they come in and take their seats. They interrupt others by asking for directions and assignments.	Have a designated signal that tells these students when they are to get ready to leave, such as a special time on the clock. Have them practice leaving and returning to the room quietly. Acknowledge appropriate behavior. Leave special instructions in a folder, on the board, or on a special sheet at their desks for what they are to do when they return. For younger students, establish a special place (e.g., the reading rug) for returning students to wait and an activity for them to engage in until you can give them personal attention.

Transition Problem	Suggested Solution
During the last activity of the day, students quit working well before the end; they begin playing around and leave the room in a mess.	Establish an end-of-day routine so that students continue their work until the teacher gives a signal to begin preparations to leave; then instruct students to help straighten the room.
Whenever the teacher attempts to move the students from one activity into another, a number of students don't make the transition but continue working on the preceding activity. This delays the start of the next activity or results in confusion.	Give students a few minutes' notice before an activity is scheduled to end. At the end of the activity, students should put away all materials from it and get out any needed materials for the next activity. Monitor the transition to make sure that all students complete it; do not start the next activity until students are ready.
The teacher delays the beginning of activities to look for materials, finish attendance reporting, pass back or collect papers, or chat with individual students while the rest of the class waits.	Have materials organized ahead of time, and when transitions begin, avoid doing anything that interferes with your ability to monitor and direct students.

These items summarize the major problems that occur in classrooms at and around transition times. If you feel that your class is wasting time or if you are having difficulty keeping control during transitions, the suggested solutions may prove helpful. If you still need assistance, ask a peer to observe and provide you with suggestions.

■ Who Will I Teach: Management Issues for Pull-Out Instruction

When students receive a portion of their instruction away from their regular classroom from a different teacher it is called *"pull-out" instruction*. Such arrangements may be made when children's achievement and ability levels are such that they would be at a constant frustration level in regular instructional activities and the regular classroom teacher does not have the resources or time to provide individualized instruction. Another common use of pull-out programs occurs in schools that receive Title 1 funding to assist children who are at risk for low achievement in reading and/or mathematics. In some schools, pull-out programs are used for instruction of children most at risk of low achievement. Finally, children who are eligible for special education services may receive instruction in a resource classroom or from another special educator such as a speech therapist.

Multiple needs in Mrs. Adler's second grade classroom

Mrs. Adler's school receives Title 1 funding, which has allowed the purchase of special materials and technology and the hiring of Title I reading and math teachers. In Mrs. Adler's classroom, as well as in other classrooms throughout the school, the students designated as most at risk for achievement problems in reading and math receive an extra half-hour of targeted instruction in either math or reading (or both) every day. This instruction is delivered in another classroom, so students "travel" at specific times. Mrs. Adler's second-grade class has five children identified as having a learning disability in reading or math. Three of these children have mild disabilities that can be accommodated by Mrs. Adler and the Title I teachers in regular instruction, but one of these three receives out-of-classroom services for language impairment from a speech specialist. Two of the children, however, need instruction in both reading and math by a special education teacher in a resource classroom for part of the day.

Pause and Consider

1. What are some potential issues Mrs. Adler will need to address as she plans for the Title I teacher to assist her with the three students who need additional assistance in her classroom?
2. What are some potential issues Mrs. Adler will need to address as she plans for the two students who will leave the classroom for work with the special education teacher and the one child who leaves the room for speech instruction?
3. Consider the content of previous chapters. What are some of the proactive decisions Mrs. Adler could make to help her students (those who are receiving additional services and those who are not) to flow easily with movement transitions and to maximize instruction and minimize interruption when the Title I teacher joins the class?

Although coteaching has many supporters (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010; McCleskey & Waldron, 2007), limited resources and time require that schools utilize a variety of strategies, including pull-out programs, to deliver instruction to students identified as needing special education or whose achievement levels require remedial instruction (Fuchs, Fuchs, Schumacher, & Seethaler, 2013; Wanzek & Vaughn, 2007; Woodward & Talbert-Johnson, 2009). Some of the potential benefits of pull-out instruction are targeted instruction in small groups, quality instructional time and attention for the students, and a quieter environment with fewer distractions than in a regular classroom with a larger number of students. Problems may occur in the areas of scheduling, time lost traveling

and in transitions, limited communication between the teachers, and instructional materials management (Woodward & Talbert-Johnson, 2009).

A number of managerial strategies are needed when pull-out programs are used.

- Scheduling of out-of-class instruction must be coordinated with the pull-out teacher's schedule and adhered to carefully in order to use time efficiently.
- Students traveling to another room need to be taught routines for quiet and orderly passing in the halls, for entry to and exit from rooms, and what to do when entering a room in which other students and the teacher are occupied.
- Instructional materials (e.g., folders, books) needed by students should be clearly identified and designated for travel or remain in the appropriate location.
- Instructional activities need to be scheduled so that students in pull-out instruction are not excluded from important content activities in their regular classroom.

Coordination of instruction between the regular classroom teacher and the special teacher is also important (Harn, Chard, Biancarosa, & Kame'enui, 2011; Friend & Cook, 2010). Students in pull-out programs need targeted instruction that complements regular class instruction, and the regular classroom teacher should be aware of the nature of the supplemental instruction and have input about its scope and focus. Finding the time for coordination and sharing of information should be a priority.

■ Chapter Summary

Students have many learning needs; therefore, teaching requires a variety of instructional plans. Planning for instruction includes establishing a daily schedule; deciding on specific content to cover and its sequence; maintaining a sense of both short- and long-range goals for students; designing lessons to meet the end learning goals (Understanding by Design) and multiple learning needs (Universal Design for Learning); varying the types of instructional activities (e.g., individual, small group, whole group); considering the use of technology; and helping students connect present with past learning as well as potential future use. Maintaining the lesson flow in progress also requires planning to prevent misbehavior, to manage movement, and to maintain a group focus. Special attention to transitions within and across lessons prevents a number of potential problems. Effective classroom management and quality classroom instruction are interrelated; therefore, effective planning helps you conduct instruction proficiently, which in turn maintains a learning-oriented classroom.

■ Further Reading

Borich, G. (2014). *Effective teaching methods* (8th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

Practical yet theoretically substantive, this book provides teachers with effective teaching practices. Attention is given to instructional topics, including lesson and unit planning, teaching strategies, and technology integration.

Feedback for Learning [Special Issue] (2012, September). *Educational leadership*, 70(1).

In this special issue, the Association for Supervision and Curriculum Development (ASCD) includes multiple articles on providing effective feedback to students. The authors (including Susan Brookhart, Grant Wiggins, John Hattie, and Carol Ann Tomlinson) review the research, provide classroom examples, and offer practical suggestions for feedback (e.g., timing, impact, technology, and student response).

McMaster, K. L., Fuchs, D., & Fuchs, L. S. (2006). Research on peer-assisted learning strategies: The promise and limitations of peer-mediated instruction. *Reading & Writing Quarterly*, 22(1), 5–25.

All students—whether at low, average, or high levels of achievement in the classroom—have achievement gains when involved in peer tutoring.

Price, K. M., & Nelson, K. L. (2013). *Planning effective instruction: Diversity responsive methods and management* (5th ed.). Belmont, CA: Thomson Wadsworth.

This work provides excellent descriptions of a variety of instructional methods, including steps in how to plan for their use for a variety of students.

Smaldino, S. E., Lowther, D. E., Mims, C. D., & Russell, J. D. (2014). *Instructional technology and media for learning* (11th ed.). Upper Saddle River, NJ: Pearson.

Focused on helping teachers maximize the use of technology for the benefit of student learning, this text utilizes the ASSURE model of lesson planning to enhance teaching.

Wiggins, G., & McTighe, J. (2005). *Understanding by design* (Expanded 2nd ed.). Alexandria, VA: ASCD.

This book outlines the process of planning from the end result of student understanding backward to the lesson at hand.

www.apa.org/education/k12/classroom-data.aspx

This module, “Using Classroom Data to Give Systematic Feedback to Students to Improve Learning,” was designed by the APA Task Force on the Applications of Psychological Science to Teaching and Learning to maximize teachers’ use of formative assessment to build toward student understanding, application, and appreciation.

www.lessonplanspage.com

This website for educators, maintained by the University of Scranton, contains thousands of sample lesson plans for all subjects (PreK–12), indexed by grade and subject.

www.teachervision.com

This website serves as Pearson's online source of free teaching materials, printables, ideas, and media.

www.udlcenter.org and www.cast.org

These websites describe UDL (Universal Design for Learning), explain how to plan effectively, and provide resources and examples. UDL is a framework for curriculum design that engages students to connect with “what” they are learning, “how” they are learning it, and “why” the learning is or becomes important to them.

■ Suggested Activities

1. Choose one of the two cartoons in this chapter and describe what you know about planning and conducting instruction in the classroom that is represented in the cartoon.
2. Answer the following questions in conversation with a partner: How do you think students learn? How do you know when someone is learning? What is your own preferred style of learning? How will these beliefs affect your choice of teaching strategies? How do they influence your philosophy of education? Consider how each suggestion supports or fails to support the kinds of learning you believe to be most important.
3. Consider Scenario 7.A. Select a grade-level situation and respond in writing.
4. Read Case Study 7.1. How many examples (or nonexamples) of Kounin's concepts (pp. 144–148) can you identify in this description? (See the key to this portion of the activity in the Appendix.) Create a lesson outline that will improve the sequence of Mr. Case's instruction.
5. Case Study 7.2. illustrates problems that can arise in conducting instruction. Use the concepts in this and previous chapters to diagnose Ms. Lake's problems and provide suggestions for improvement.
6. Teachers are sometimes caught between the need to cover a broad range of content quickly and the need to develop more specific content to deepen students' understanding. Interview several experienced teachers to get their ideas on how to meet this challenge.
7. In a single classroom, observe a couple of lessons with different formats of instruction (e.g., whole-group content development, centers, discussion, testing). Respond in writing to the following questions: What types of lesson formats did you see? How did these formats differ in arrangement, procedures, and advance planning? What management techniques did the teacher use across these differences?
8. Go to either www.lessonplanspage.com or www.teachervision.fen.com and select a few lesson plans. How well are they organized around powerful ideas, long-range goals, and supporting objectives and activities? How are the components of UbD and UDL included? If you were to teach from one of these plans, what changes would you make? Why?

SCENARIO 7.A

Imagine that you are teaching one of the following classes (A or B). Select from the lesson ideas provided, and discuss in writing how you might sequence them in planning the unit described and why the sequence you are choosing would be effective. What additional lesson ideas do you have that would include other instructional formats?

- A. A second-grade class's upcoming unit on plant growth, parts, and seed distribution; the class has science scheduled for three 30-minute sessions per week; unit to last 2 weeks. Lesson ideas include
 - Walking field trip to the school's front flower garden to meet a local Master Gardener and to learn about and plant spring flowers
 - Science center activity of "planting" five varieties of beans in a zipper bag with a wet paper towel. Bags are then taped to the window for observation and journaling
 - Literature lectures for the whole class that begin with a poem or children's book to introduce plant parts, plant growth, seed distribution, and plant life cycles
 - Local landscaper as guest speaker to bring varieties of flowering plants and discuss plant caretaking
 - Small-group watching of online videos of plant growth, seed distribution, and the plant life cycle
- B. A fifth-grade class's upcoming unit on state military history; class has social studies daily for 25 minutes; unit to last 2 weeks. Lesson ideas include
 - Guest speaker: retired local National Guard officer with Gulf War service
 - Student pairs taking online tour of state museum exhibit "[State] at War"
 - Small-group exploration of assigned military engagement (e.g., American Revolution, Civil War, WWII, Vietnam) by state's units/soldiers (Individuals from differing groups are then partnered to create Venn diagram comparing and contrasting the state's service in differing engagements.)
 - Whole-group lectures with photographs, maps, and charts on the state's involvement in select military engagements
 - Reading through a chapter on military history in the district-adopted textbook on the state (as individuals, small groups, or whole class)

■ Case Study 7.1
A MATH LESSON IN A FOURTH-GRADE CLASS

As Mr. Case is about to begin class after lunch, he makes eye contact with two students who are exchanging notes; the students quickly get out their class materials. "Let's begin by working some of the exercises at the end of the chapter; you will need a piece of paper with a heading." As students begin to get out their materials, Mr. Case calls out, "Oops! I forgot to tell you to bring money for tomorrow for the field trip. How many of you will be going?" After a brief discussion, students finish getting out their materials. Mr. Case says, "We'll go through these exercises orally, but I also want you to write the answers on your papers as part of today's classwork. I'll come around later and check your answers. Now, who can answer the first question? Hands please, Tyrone?"

Mr. Case conducts the lesson by calling on various students, some with hands up, others seemingly at random from the nonvolunteers. About halfway through the exercises, a student enters the room and says that he is new to the school and has been assigned to the class. Mr. Case goes to his desk and sits down. "Okay, come here. I'll check out some of your books to you. I wish the school office wouldn't send children in the middle of the day. Where are you from, anyway? That's a nice shirt you are wearing."

After finishing with the student and sending him to a seat, Mr. Case leaves his desk and says to the class, "Now where were we? Oh, yes, question 7. Say, where did Kim and Lee go? I didn't give them permission to leave."

After several more minutes, Mr. Case calls a halt to the activity and says, "Now, I'd like us to discuss the test coming up this Thursday. Let's make sure that you are all clear on what will be on the exam and what you will need to do to get ready for it." After a pause, he adds, "I almost forgot. Get your questions from before, and look at the next to the last one. We have to add an important point that was left out. . . ." After finishing the item, Mr. Case turns the topic back to the upcoming test: "Now, where were we? Oh, yes. I want to show you some items that will be similar to those on the test. Here's one." He writes it on the board, then pauses: "Well, I don't want to give away the test, do I?"

Without discussing the test further, he turns to another topic: "Just wait until you hear about the video we will be viewing tomorrow. I saw it on another teacher's Web posting during lunch, and she said that her students thought it was one of the most interesting, exciting stories they had ever seen!"

Case Study 7.2

A SCIENCE LESSON IN A SIXTH-GRADE CLASS

Ms. Lake has been having great difficulty obtaining acceptable or even completed work from many of her sixth-grade students. They never seem to be able to follow instructions or directions, even for assignments in the textbook. Only the most able four or five pupils are actually doing good-quality work. Ms. Lake likes to challenge the students with new ideas to stimulate their curiosity and promote independent thinking. Although much of the class appears to enjoy her presentations, the students don't seem to be able to transfer their enthusiasm to their assignments. For example, in a recent science assignment, students were supposed to draw pictures illustrating stages in the evolution of birds from reptiles; most students did not perform satisfactorily. The lesson preceding this assignment included a five-item test containing questions on birds, reptiles, and vertebrates, reviewing some content covered during the preceding week. Students checked their own answers to this test in class and then passed them in. Although it was not a difficult test, most students got three or fewer items correct. After the checking activity, the teacher began a 20-minute presentation on the possible evolution of birds from reptiles. The following topics were discussed:

- The meaning of adaptation, with an example supplied by students
- A student introduced the topic of environmental action in the local community, and other students added comments
- The possibility of life on other planets, including a discussion of the number of solar systems in our galaxy

- A consideration of the question of why birds might have evolved from reptiles, with a student's answer, "To get away from enemies, they would take to the air," as the only reason given
- The classification system of living organisms: kingdom, phylum, class, order, family, genus, and species

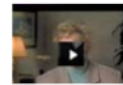
At this point in the presentation, students were instructed to copy the classification system from the board. Ms. Lake also provided an example of classification, using the lion in the animal kingdom, vertebrate phylum, mammal class, and so on. Two similar examples were also presented and listed on the board. The teacher asked whether students understood and if they had any questions. No questions were forthcoming, so Ms. Lake gave the assignment of illustrating the stages in the evolution of a reptile to a bird. Students were given 25 minutes and told, "Use some color in your picture, make it neat, and use three stages." As was the case with many of the assignments Ms. Lake gave, only a few students completed their work satisfactorily, although most seemed to make an effort to do some drawing, and many students checked frequently with Ms. Lake to see whether their pictures were acceptable.

MyEducationLab *Self-Check 7.1*

MyEducationLab *Self-Check 7.2*

MyEducationLab *Self-Check 7.3*

MyEducationLab *Application Exercise 7.1* Using what you've learned in this chapter, view the video and respond to the questions.



MyEducationLab *Application Exercise 7.2* Using what you've learned in this chapter, read and respond to this scenario.

MyEducationLab *Application Exercise 7.3* Using what you've learned in this chapter, read and respond to this scenario.

MyEducationLab *Classroom Management Simulation 7.1* Engage with the Classroom Management Simulation *Effectively Handling Transitions*.





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CHAPTER 8

Managing Cooperative Learning Groups

Students in Mr. Stockton's fourth-grade class are seated at small tables in groups of three or four. In previous lessons, each group drew a design for a bridge after studying types of bridges and assembling reports on famous bridges around the world. Each group is currently constructing a model of its own design, using materials such as Popsicle sticks and tongue depressors, paper, glue, string, and rubber bands procured by the group's "materials manager" from the classroom supply center. The students are engrossed in the activity and proceed without much direction from their teacher, who circulates among the groups, encouraging, asking questions, and making occasional suggestions.

When Bryce leaves his group to complain to Mr. Stockton that DaLynn is wasting materials that their group needs to finish the bridge, Mr. Stockton asks Bryce whether he has talked to DaLynn about the problem. He suggests that Bryce bring up the matter with the other students in their group to see whether they can resolve the difficulty before seeking his help. When another group stops working, Mr. Stockton goes to their table and suggests that they review their construction according to a list of criteria developed in an earlier class discussion.

Pause and Consider

What is the teacher doing? What are some of the instructional decisions Mr. Stockton made prior to this moment?

Vignette Reflection

With a partner, discuss your responses to the following questions: What is Mr. Stockton's role in this lesson? What are the students' roles? What procedures does he already have in place? What preparations did he have to make for this specific lesson?

Mr. Stockton is using a form of instruction called *cooperative learning groups*. As the name implies, the method involves organizing students into small groups in which students complete assignments cooperatively, assist each other, solve problems, share materials, and participate in their own discussions. Teachers who use cooperative learning groups do so because they believe that the method increases learning and involvement. Many teachers also value the increased independence of students that results from an emphasis on group planning and decision making. These teachers describe their roles as being more facilitators than directors of group activities. Finally, teachers value the social skills and problem-solving abilities that students learn through frequent group work. They believe these important life skills will serve students well in social settings in or out of school.

The term *cooperative learning* is utilized in this text in its broadest sense, to indicate students working collaboratively in groups of two or more to accomplish an instructional goal, instead of referring to a specific form of group learning. In the classroom, you can group students in a number of formal and less formal ways, sometimes to yield specific group products or results, and other times to help students experience a process. Using cooperative groups requires some modification of traditional managerial routines. A number of the procedures that you developed for managing work and behavior in whole-class and individual formats also apply to cooperative groups, but you will have to modify some of your procedures for talk and movement. In addition, your managerial tasks of pacing activities, monitoring, and giving feedback to students become especially important. Most important, you must teach your students the skills necessary for working effectively in groups.

■ Research on Cooperative Learning

Substantial research on cooperative learning has focused on its effects on achievement and other outcomes of importance, such as interpersonal relations, motivation, and student attitudes toward learning (Gillies, 2015; Gillies & Ashman, 2003; Johnson & Johnson, 2013; Slavin & Lake, 2008). Explanations of the positive

benefits of cooperative groups usually point to the students' increased engagement with the content as an important factor. Compared to large-class or individual work formats, collaborative small groups result in increased student academic achievement (Hattie, 2012). With small group work, there is greater potential for participation, feedback, and mutual construction of meaning among students. The group format encourages students to become active participants rather than passive recipients of information. Other explanations suggest that lower-achieving students profit from their peers' explanations, and high achievers benefit from constructing explanations for other students. All students can develop interpersonal skills and relationships through group tasks with a common goal. Furthermore, all can benefit from the support they receive in a cohesive group. Such support can help create positive norms for achievement and learning.

Although cooperative groups can improve learning and other outcomes for students, simply grouping students by no means ensures these results. Research has identified a number of strategies that you can use to promote the effectiveness of cooperative groups (Emmer & Gerwels, 2002; Gillies, 2007; Lotan, 2006). Such actions include teaching students how to work in groups, practicing the role of facilitator, carefully choosing and pacing academic activities, and promoting interdependence along with individual responsibility. Characteristics of more effective cooperative group lessons also include some form of daily accountability (versus later or no evaluation of individual or group performance), teacher monitoring of and feedback to groups, and the use of manipulative materials (Emmer & Gerwels, 2002).

The importance of these and other actions depends in part on your goals and the nature of group-based academic tasks. Some teachers use groups as the primary means of instruction and develop projects and an integrated curriculum to deliver much of their academic content. Other teachers use groups primarily as a supplement to whole-class and individual instruction in one or a few subject areas, relying on groups during the classwork portion of lessons to provide short practice activities. Whichever approach you adopt, you will find the strategies described in the remainder of this chapter to be helpful. You will, however, have to tailor them to your own application.

■ Examples of Group Activities

In Ms. Liu's second-grade class, students work in pairs with a chart and a bag of plastic coins of various values. The chart has 10 rows, with columns headed by "Penny," "Nickel," "Dime," "Quarter," and "Half-Dollar." Ms. Liu asks the pairs to fill in the chart with coins to total a particular amount. After about 15 minutes, Ms. Liu has the pairs demonstrate their results to another pair in prearranged groups of 4. She leads a whole-group conversation about the many ways the same dollar amount can be achieved.

Mr. Garcia uses groups of three for reading comprehension activities. Students rotate in the roles of reader, summarizer, and questioner, depending

on the day. Some days, before the activity begins, Mr. Garcia conducts a short whole-class discussion about how to ask and answer questions in the group. During the 20-minute activity, he observes each group for 2 or 3 minutes, occasionally giving feedback or making a suggestion.

Ms. Dodd's fourth-grade class has been studying the culture and customs of the Quileute people. During one activity later in the unit, students choose tribal roles to dramatize in a "freeze frame." Each group of four or five students plans their dramatization to depict an important activity, such as whaling, in the Quileute culture. Ms. Dodd monitors, answers questions, and makes suggestions as she circulates among the groups during a 30-minute planning and rehearsal period. Afterward, each group enacts the freeze frame for the class. A follow-up discussion of each role-play is conducted to clarify the depicted concepts.

Mrs. Richardson's fifth-grade science class works in groups to build models of a go-cart, using wooden wheels of various sizes, sticks, rubber bands, paper clips, and other materials. In a sequence of three lessons, students explore various constructions to try to create self-propelled models that will travel various distances. Mrs. Richardson encourages the groups to discover the effects of friction and wheel sizes, how to generate power, and how to transfer motion using an axle. Each student records observations in an individual notebook, but the construction is a group activity.

Pause and Consider

What are some of the similarities in these examples? How might the use of groups vary by student age? subject? desired outcome or product?

Vignette Reflection

Please discuss your responses to the following questions with a partner: What would students find attractive about the lessons depicted in these vignettes? What actions do these lessons require of the teachers to make sure they are effective? How are these lessons different from whole-group instruction? How might whole-group instruction be involved in these lessons?

The examples presented in these vignettes indicate the range of group activities possible in several content areas of the elementary curriculum. However, getting multiple groups to operate smoothly and productively requires planning by the teacher and preparation of the students. Try to visualize these groups in action, and imagine the repertoire of behaviors students need to engage successfully in the activity. Consider also how the physical setting of the classroom must be arranged to accommodate group activities. Note that the teacher's role during the group activity is less focused on giving information and more concerned with monitoring and giving

feedback. This doesn't mean that teachers who use groups don't engage in teacher-led content development activities or use individual work exercises. Such activities are used, to varying degrees, along with group work.

We turn next to the procedures, routines, and teaching strategies that will help you manage group-based activities effectively.

■ Strategies and Routines That Support Cooperative Learning

Beginning to Use Cooperative Learning Groups

Whether you begin to use groups at the start of the year or wait until later, you should address several matters. It is important that the physical arrangement of the classroom support the use of groups, especially if you intend to use them extensively. You should also teach the desired procedures for the groups as initial group tasks because you want a successful experience to set the stage for subsequent group activities. Group composition is important; students must be able to work constructively with each other and aid each other's learning. Additionally, you must plan how to teach the group attention signals needed for effective communication mid-lesson. Finally, it is critical to balance building group interdependence and simultaneously developing individual student accountability.

Room Arrangement. If you plan to make extensive use of groups, arrange seating in groups rather than having students move to group seating each time the format is used. Some classrooms are equipped with tables. In the absence of tables, desks can be pushed together to form groups. To facilitate monitoring, seating should be arranged to permit your unrestricted movement among the groups. Remember also that group participants will be talking among themselves as they complete projects. Try to arrange groups to minimize distraction from other groups' noise. Teachers often begin group activities with pairs of students and increase group size as students become familiar with the experience, but seating arrangements can still accommodate larger numbers, such as table groups of four.

In some classrooms, it is necessary to move from whole-class arrangements to small groups. In that case, mark the location of tables or desks in each arrangement, using colored tape on the floor. Many teachers have found that putting slit tennis balls on the bottoms of chair and table legs makes for quieter, quicker movement. Teachers can also mark the location of groups by hanging symbols or signs over their sites in the classrooms.

Storage of student materials is an integral part of room arrangement. Store materials for easy group access either at the group site in a collective container or in a location where a "materials manager" from each group can obtain them efficiently. Keeping the containers stocked is your responsibility as facilitator or can be designated as a classroom job. Individual materials can be kept in desks, on open

closet shelves, or in a bookcase. Some teachers place a small box or bin in the middle of each table for materials to be used by everyone in the group. This eliminates the need for borrowing and reduces the need for trips to out-of-group storage areas (see also Chapter 3).

Procedures and Routines. Don't assume that because students follow the rules during whole-class and independent work activities, they will automatically do so during group work. Instead, be prepared to teach students your specific expectations for talk and movement during group work. Teachers often report that when they begin using groups, they are bothered by the increased noise level. After a while they get used to it and are less anxious when they realize that the noise is coming from engaged, involved students. Nevertheless, to prevent excessive or extraneous noise, you should discuss with students your expectations about talk and give them guidelines. One common guideline is the use of "12-inch" voices, voices that can be heard only the distance of one foot (or to the ears of fellow group members). Another is to speak quietly enough so that students in nearby groups can't hear or aren't distracted. Using "whisper voices" does not work well as a guideline because groups usually can't work efficiently and conduct discussions while whispering. If noise becomes excessive, you can use a group attention signal to decrease noise to an acceptable level. If noise continues to be a problem, groups can work silently (communicating through written notes only) for the remainder of the session.

Discuss your expectations for appropriate behavior during movement and transitions. Emphasize the importance of everybody working toward the group's success. For example, provide a guideline such as "Stay with your group" or "Take care of out-of-group business promptly" to limit unnecessary wandering and visiting. Some movement is needed, of course, when students obtain materials.

Some teachers change group composition for various activities, resulting in movement during transitions between the activities. Such transitions can be time wasters and make it difficult to start the next activity. An efficient routine is to ensure you have all students' attention, announce the beginning of the transition, state the expectation, and tell students how much time they have to make the transition (e.g., "All of you must bring your materials and be in your group in 1 minute"). Continue to monitor throughout the transition to cut down on stragglers. You can also state an expectation about what the students are to do when they arrive at their group's location (e.g., "Sit in your seat and put your supplies—book, paper, pencil, and so on—on the table," or "Start work on your project right away").

In instances when the room must be rearranged for cooperative learning groups (e.g., when you share the classroom with another teacher), plan ahead to speed these transitions by marking the desired locations of the desks. Teach and practice movement into groups as you would any other procedure. As you teach group procedures, ask students for their views on what makes groups work well together; then incorporate their ideas in your guidelines for good group participation and cooperation. (For additional procedural suggestions, see also Chapters 4 and 5.)

Forming Groups. At the beginning of the year, before you know your students very well, it may be instructive to allow students to choose partners for a few initial activities. Limit the length and scope of these activities, and monitor closely to make sure that no child feels left out. Your initial use of groups may involve pairs only, having the students simply check each other's work or discuss a question or problem. You might also use pairs to work on a class exercise or to practice spelling words or number facts. When pairs are used in such straightforward ways, most students do not have to move to new locations, and the activity is brief, placing fewer demands on the students and on you.

As groups are used more extensively, frequently, and with increasing levels of accountability, group membership becomes more critical. Teachers usually form groups ahead of time and seat students accordingly rather than have students move to new locations for group work, although that is not always the case. Different groups might be formed for math, for example, than for reading and social studies. It is helpful to have more than one grouping option planned in advance.

When assigning students to groups, a main consideration for most teachers is to represent in each group a range of achievement in the subject. A second concern is often to place an appropriate leader in each group (see the section on leadership skills later in this chapter). When forming groups, try to avoid personality conflicts. Students who are argumentative often work best in groups that have a student with good leadership abilities, including social skills. Gender, English language fluency, artistic ability, and other traits can also be utilized to vary group composition to meet age- or grade-appropriate needs or to match the group task assigned.

Some teachers avoid placing in the same group those students who are at extremes in achievement levels in the content area. For example, they would not place a very high achiever and a very low achiever in the same group; rather, they would seek less variation by pairing a midrange achiever with a very low achiever. The concern is that the pace of work and the discourse patterns in the groups with very high-achieving students may be inappropriate for and intimidating to the lower-performing students, resulting in their withdrawal and task avoidance. In groups having mid-range achievers, the pace and vocabulary are more likely to encourage the lower achievers' participation. This principle obviously depends on the degree of social and explanatory skills various students possess.

No hard-and-fast rules can be stated about how long groups should stay together. Some teachers change group membership frequently, as often as every few weeks. Most leave students in the same groups for longer times but shift membership at least a few times each year. Some teachers allow students to form their own groups for special activities or projects or as a change of pace, but rarely do they allow self-selected groups for an extended time, except for a special project. An alternative grouping technique is to group the students by interest. Place several topics or types of activities on the board. Have the students write down their first, second, and third choices. Collect the choices, and assign students to groups based on their first or second choice.

After groups are formed, they should be monitored for signs of conflict. Don't be too quick to step in with a solution, but do ask groups to address such problems.

Giving students responsibility for dealing with group problems can create an opportunity for learning. As students acquire group skills and experience success in working together, conflict usually diminishes. When conflicts cannot be resolved in a reasonable time within a group, most teachers choose to move antagonistic students to new groups. Later in the year, when such students have become more adroit at cooperating, they might be given an opportunity to work together again.

Group Attention Signals

When your students work in groups, you might have to stop their work to provide additional directions or to make a transition to another activity or task. You might also have to provide feedback to the whole class, modify some aspect of the assignment, or provide additional instruction. Also, noise may rise to unacceptable levels, requiring that you intervene. In all of these cases, you must interrupt students who are already engaged in a task or who are interacting with each other, making it difficult to gain their attention. One solution to this problem is to use a signal.

Efficient signals for group attention require that the students make an overt response, which interrupts whatever else they may be doing. Practice of, feedback on, and consistent reinforcement of student responses to these signals is critical.

The teacher says, “One, two, three,” clapping as she does so. Students respond, “Eyes on me.” Students turn their attention to the teacher.

The teacher says, “Thumbs up if you can hear me,” “Fold your hands if you can hear me,” or “Clap if you can hear me.” Students respond with the action as they hear the request.

Each of these signals gains student attention by requiring that students substitute a behavior, thus effectively stopping the prior activity. These signals are especially useful when students are working with manipulatives, which might distract them from attending.

Sometimes a signal may be used to pace students through a transition between activities. A signal is especially helpful when the transition involves the movement of students from one location to another. The following signals may be used for such transitions, as well as to gain student attention:

The teacher claps rhythmically, first twice, then three times. Students pick up the clapping rhythm: After the teacher claps twice, they clap in unison three times.

The teacher turns off the light, then begins clapping and counting, “Ten, nine, eight, seven, six, . . . one, zip.” Students pick up the count as they complete the prior activity, clap, and repeat “zip” in unison with the teacher, “zipping” their lips at the end.

Bell ringing and a simple oral direction such as “Stop, look, listen” are useful signals when students are not as interactively engaged, thus requiring a less dramatic or intrusive stimulus to get their attention. Teach several signals to avoid overworking

one of them and to give you some options. Finally, avoid interrupting students unnecessarily. Present information or directions ahead of time or post them to minimize the need to break into ongoing student activities. When appropriate, give reminders to individual groups rather than to the whole class.

Promoting Interdependence within the Group

Positive interdependence has occurred when either the group's product or the individual's performance is enhanced by the actions of the group members. In addition to improving performance, interdependence builds group cohesion and helps create group norms that support learning. Interdependence can be fostered in a number of ways:

- Each student can be responsible for contributing a unique component to the group's product. For example, students might do research on different aspects of a topic for a group report.
- Each student chooses a specific part of a topic to teach to the rest of the group. Or, in groups of four students, pairs work together to prepare information for the other pair of the group.
- In groups of two, students work as drill partners to help each other learn.
- The teacher assigns roles to students (e.g., reader, checker, recorder, materials manager) to ensure that each student makes a contribution to the group's activity.
- Group assignments (e.g., projects, reports, performances, constructions, oral group presentations) can be given a group grade, recognition, points, or some other reward.

Individual Accountability

When group assignments are the outcome, establishing group accountability—for example, by giving the group's product a grade or by asking the group to report orally—may not be sufficient for some students, who may be content to loaf or ride other students' coattails. Group participants might also miss content if some of the group's members dominate the task. Individual accountability in the context of a group-based assignment may be increased in several ways:

- Require that individual students perform an identifiable portion of the group assignment.
- Ask groups to turn in a list identifying each student's contribution to the final product.
- Ask students to record observations in individual notebooks that you will collect and grade at various times.
- Have students turn in individual work along with the group's product.
- Prepare individual lesson or unit note-taking forms on which each individual student records his or her learning across the group project to focus on key content covered.

- Require that students keep a daily record of their individual work in spiral notebooks.
- Let students know that when their group reports to the class, each student should be ready to explain her or his work.
- Have selected students report individually on their group work.
- Give students a quiz based on the group assignment.

You can foster individual responsibility when you set expectations: Stress to students that even though they are working on a group assignment, each member is responsible for learning the material. Tell them that it's important for all members of a group to help the others understand what they are learning, and for each person to contribute. Finally, when you monitor group work, note participation by individual students. If some are not contributing, try to determine why not; then take corrective measures such as redirecting those students. When simple interventions don't work, teachers often ask the group to help solve the problem, or they may have a conference with the student to try to assess the situation and to work out a solution.

Maintaining individual responsibility in a group setting is not easy. Adding individual assessments on top of group assessments may increase the amount of time the teacher must spend on planning and preparation as well as evaluation. Moreover, focusing on individual accountability may deflect attention from group outcomes. Procedures for accountability, therefore, should be planned carefully and amended as necessary until you develop a balance between accountability needs and available time and energy. If difficulties cannot be resolved, reconsider whether cooperative learning is the best format for the content you are teaching.

■ Group Tasks

The quality of the tasks you develop and assign to groups is of significance to their ability to complete them successfully. Initially, you will want to plan tasks that help groups focus on learning to work together as well as developing group work skills.

Mrs. Walker focused on one group-work skill per week until her fifth-graders developed an effective repertoire by the end of the first 6 weeks of the school year. During the first week, she emphasized how to participate during group work; the second week, she focused on remaining on task. Subsequent weeks were devoted to cooperating, encouraging, explaining, and active listening. Mrs. Walker introduced each skill in a whole-class discussion, soliciting examples, suggestions, and a rationale from her students. During the first week, she displayed a five-point rating scale for "participating" and indicated what she would be looking for as students worked in groups. At the end of several group activities that week, she engaged students in a discussion about the skill, asked them to review their performance, and shared her assessment

of student participation with the individual groups. In each subsequent week, Mrs. Walker added a new scale, so that groups received feedback about their progress in acquiring the skills.

Pause and Consider

What group work skills did Mrs. Walker choose to feature and in what order? What other group work skills might she want to practice with her class across the next six weeks?

Vignette Reflection

Respond to the following questions in conversation with a partner: Why might Mrs. Walker have chosen the sequence she did for these group work skill lessons? How did her pacing impact the students' understanding of these skills and their importance to group work? How might you rearrange or modify her sequence and pacing? Why? How might the pacing and sequence of skills change if Mrs. Walker were teaching a different grade level?

Initial Group Tasks

Students who don't have much experience with working in groups will have to develop their skills in uncomplicated tasks rather than in complex projects. It's important not to rush into group work before you have built a foundation of practice and skills. Beginning groups find tasks easier in simpler formats with uncomplicated procedures, such as the ones described next. After your students have had success in some of these initial group tasks, they will be ready for more complex group formats and assignments. Holubec (1992) suggests several formats:

- **Drill partners.** Partners practice material that must be memorized.
- **Reading buddies.** Students read to each other. The teacher can build on this after a while by asking students to summarize or make up questions for their partners.
- **Summarizing.** Partners take turns retelling directions, content, or other material in summary form.
- **Checking.** Students compare answers and resolve discrepancies. Each student must be able to explain the answer.
- **Reviewers.** Students review for a quiz or test or prepare for an oral report by working together to develop questions. They ask and answer each other's questions.

Teaching Group Work Skills

A good way to begin the teaching process for group work skills is to have a whole-class discussion about what is needed to work cooperatively. To build a rationale for working together, some teachers like to broaden the discussion to include home, playground,

and neighborhood as well as classroom groups, and to discuss the character and life skills needed. Eventually, of course, the discussion has to address concrete behaviors that constitute good social, explanatory, and leadership skills in groups.

Social Skills. The ability to work in a group depends on social skills, so teachers usually emphasize the development and reinforcement of appropriate use of social skills throughout the year. Teachers might even teach certain phrases for students to use in summarizing, questioning, or expressing disagreement.

One important social skill is active listening. *Active listening* includes listening to others without interrupting, being able to summarize others' ideas, incorporating those ideas into the ongoing discussion, and using them constructively in completing the group's assignment. Sharing materials and taking turns are also necessary for effective cooperation. Another important social skill is *giving support*, which includes accepting differences, being friendly, and encouraging others.

Students who lack social skills might insist on doing things their way, argue frequently, ignore or put down another student's contributions, or fail to participate in the group's work. When students lack social skills, it impedes the group's progress and can negatively impact student learning. It's important to take time to teach and reinforce these skills at the beginning of group-work activities as well as throughout the year.

Explanatory Skills. Explanatory skills are an important aspect of group work, and they are critical to the development of academic outcomes. Indicators of explanatory skills are comments that describe a problem, assignment, or goal. Student comments might also identify steps to be accomplished or followed to complete a task, as well as reasons for the steps. Students might summarize the work they have done or plan to do. If a group assignment includes answering questions, students can give their answers and explain how they arrived at them.

Another important component of the explanatory process is seeking explanations from others. This may involve students in describing what they do and do not understand and asking for help from other group members. Such requests are unlikely to occur unless other students in the group practice good social skills. To encourage students to seek help, the teacher might say, "No one knows everything. If there's something you don't understand, it's smart to ask for help from the group. And if someone asks for help, the friendly thing to do is to give a good explanation."

Making thinking explicit and sharing thoughts about content with one another are higher-order skills, and they do not come easily to most students. Teachers can foster good explaining skills by being good models themselves and by demonstrating the skills. Gillies (2015, pp. 264–265) recommends that teachers use a variety of communication skills and then encourage students to use them during group work. Types of communication skills include probing and clarifying (Can you tell us a little more about that topic?), acknowledging and validating (Now I understand it. . . . You've worked hard to finish on time!), clarifying options and discrepancies (I'm not sure how to do that. . . . How does that work?. . . Can you think of another way?. . .), and

tentatively offering suggestions (What might happen if you tried another strategy?). Explicit teaching of explanatory talk encourages students to share their ideas.

Interactions about content are essential to the process of constructing meaning. They enhance comprehension and are critical to learning. Most students need encouragement to engage in these behaviors because conversations about content are not a natural part of their interactions. Some ways to encourage them include these:

- Model for students several ways of summarizing and clarifying by using available text material. Then ask students to practice in pairs, alternating roles of explainer and listener. Provide reminder cards or visual display.
- Ask students to turn to a partner and explain something (a process or a concept); then have the partner “explain back” what he or she heard.
- Have each student in the group write one question; then have the members of the group answer it.
- Conduct role-plays of asking for help and explaining; demonstrate and discuss the examples portrayed.
- Lead a discussion about how to give a good explanation and how to ask for help.
- Have students write their group’s ideas on a chart and present them to the class.

Leadership Skills. When a group member steps up and says, “Let’s figure out what we need to do to get this job done,” this student is practicing a leadership skill. Desired attributes include demonstrating initiative, planning, and enthusiasm. Good social skills also complement this repertoire, as does basic competence in the content relevant to the group’s task. Teachers can help students develop leadership skills by assigning roles such as presenter or discussion leader, which give students the opportunity to demonstrate initiative and gain confidence. Such roles should be defined clearly and the tasks delineated. Roles should be rotated so that every student gets an opportunity for practice.

Most teachers value leadership skills highly and try to form groups with at least one student who exhibits them “naturally.” It is also wise to help the natural leader learn to take direction from the assigned leader when it is that student’s turn. Although leadership skills are developed over time and students possess them in varying degrees, all students can make some progress toward learning and achieving them.

Some group skills can be taught by assigning roles to individual students in a group. Roles such as materials manager, recorder, discussion leader, encourager, discussant, and reporter entail the use of specific skills. By assigning some of these roles to students, teachers encourage them to practice new behaviors. Rotating the roles among group members permits all students to gain experience. Using roles also helps promote interdependence among the group members because each student has a unique job to perform for the group. Roles that are frequently used can be written on cards, along with key behaviors, then laminated. Posters with role descriptions can also be displayed in easy-to-see locations until students have mastered the basics.

Posting desired group behaviors, providing students with examples, and modeling desired group behaviors are important and should be accompanied by practice and feedback. Remember that it takes many weeks for some students to become

comfortable with the new demands of group participation. Be patient. Rather than reviewing all desirable group skills, select one and spend time discussing it. Let students practice the skill, and give them feedback as they work in groups. Introduce other skills in subsequent days or weeks.

As in the vignette of Mrs. Walker, the use of scales is one way to focus students on specific components of group work. Another way is to conduct whole-class discussions about group-work activities. Begin with a request that students evaluate an aspect of their group work, indicating what went well and what could be improved. Or they might be asked to describe how someone in their group performed one of the group skills effectively. Students might also describe what makes it difficult to perform a particular skill and how that problem might be overcome. Getting students to talk about their group experience is one of the best ways to help them develop good group work and self-regulation skills.

■ Monitoring Student Work and Behavior

Good monitoring of group work requires that you be on your feet and walking among the groups, scanning the rest of the class, just as you do when monitoring any classroom activities. Try not to spend too much time with any one group at the expense of another. Goals for monitoring include keeping track of individual performance, behavior, and growth in academic areas, as well as group performance and skills. A complicating factor is the extent to which individual versus group performance must be distinguished.

The way teachers keep track of student work in groups depends on the nature of the group activity. When individual assignments are used and the group's function is to support individual learning, monitoring academic performance is completed by circulating among the groups and noting individual performance. You can also collect the individual assignments and check them. Critical to the effective utilization of groups for the support of individual learning is the quality of interaction among students—that is, providing explanations and demonstrations for each other rather than simply giving answers or ignoring peers' questions. Remember that the best way to teach appropriate helping behaviors is to model them yourself.

An effective monitoring technique is using a clipboard that contains student names and space to record ratings or notes about performance and behavior during group activities. When this technique is used, it encourages teachers to obtain information about all students, not just the active, visible ones. The information can be used later to give feedback to groups and individuals or to add to performance evaluations. The use of this strategy as seldom as once or twice a week can add important information about individuals and supplement other types of monitoring.

With group assignments, the focus of monitoring shifts to the group's collective progress, along with individual performance. If you provide checkpoints and time limits, you will not only give yourself monitoring milestones but you'll also help students self-monitor. Asking groups to report to you on their progress, plans, or difficulties also provides information about comprehension that you might not obtain through observation alone. It may be additionally beneficial to include an

individual component in a collective assignment. For example, ask students to record individual observations, solve a problem, or write a summary of their contribution to the group's project. Such data will increase your information about each student's achievement and each group's progress, and the procedure will also improve individual accountability.

Group work skills are an important concern when monitoring (see the previous section). As is the case with academic skills, students vary in their understanding and use of cooperative behaviors. Posted checklists and a careful program of teaching students important group-work skills go a long way toward helping the students self-monitor, but you should also pay attention to the extent to which individuals and groups operate appropriately. At the beginning of each group assignment, spend time explaining to the class how individual and group progress will be assessed, and structure and monitor group tasks carefully to see that all students are participating. Consider providing rubrics to groups to identify desired interactions at the group level and desired mastery of content at the individual level. Here are two examples: www2.uwstout.edu/content/profdev/rubrics/elementworkrubric.html and www.mnsu.edu/cetl/teachingwithtechnology/tech_resources_pdf/Sample%20Group%20Work%20Rubric.pdf.

Teachers use various indicators to determine satisfactory group functioning. Because students usually have a specific task to perform in the group, it is not difficult to determine whether they are engaged in a suitable activity. When students are talking with each other about the task and performing behaviors needed to complete an assignment such as writing, assembling materials, practicing, or constructing, teachers can easily identify appropriate, on-task behavior. Teachers also watch for signs that individual students may be uninvolved or disengaged. Momentary off-task behavior can usually be ignored, but if it is prolonged, intervention may be needed. Another indicator is the level and nature of emotionality that students exhibit. Students' tense, angry, or hostile behaviors suggest frustration or potential conflicts that could escalate and therefore call for early intervention to prevent the development of more serious problems.

■ Interventions for Groups

Interventions for groups are closely tied to the monitoring features just described. The most common interventions are simple, easy to use, and brief. During the initial stages of group work, when students are acquiring group skills, it is especially important that appropriate behaviors be identified and supported. Interventions with students who aren't practicing good group behaviors can sometimes be addressed as a group problem: "Roberto isn't participating yet. What can the group do to let him know that it supports his participation?" At other times, discussing the situation with the individual student may be the best way to encourage attempts to practice group behaviors. Students who persist in inappropriate behaviors may be given a short time-out (such as 1 or 2 minutes, initially) or sent to work alone for a longer time if they don't respond to milder interventions. Other interventions for individuals are described in detail in Chapter 11.

At times, teachers find that using rewards is helpful as an extra motivational tool to encourage students to practice appropriate group skills or to improve the participation of undermotivated students.

Mr. Galvan used a weekly raffle system, rewarding students with “tickets” for desirable group behavior (e.g., staying on task, using time wisely, using materials prudently). A group could also receive bonus tickets when all of its members did well on an assignment. Students initialed their tickets, dropped them in the ticket box, and at the end of the week, Mr. Galvan drew four or five from the box; winners received small toys or privileges as prizes.

Ms. Frank gave points to groups for desirable behaviors, such as getting ready or cleaning up promptly, helping and sharing, or listening and explaining. For example, she awarded points during group work by telling a group, “The way you have been explaining your ideas to each other has helped your group demonstrate active listening. You have earned a group point.” She also awarded points during wrap-up discussions with the whole class, noting that she observed good examples of desirable behavior during group work. She kept a tally of points for each group on the board; when a group reached a set number of points, its reward was to eat lunch with Ms. Frank in the classroom.

Pause and Consider

What are Mr. Galvan and Ms. Frank rewarding? How are their actions group interventions?

Vignette Reflection

Discuss with a partner your responses to the following questions: How might the use of rewards help these groups succeed? How might the rewards motivate students? What dangers might there be with using rewards in this setting?

Judicious use of rewards can direct student attention to important behaviors and make it more likely that students will employ them. Group rewards, moreover, can strengthen cohesiveness through a common goal and the shared positive feelings that result when the group succeeds. However, as will be noted in Chapter 9 in the discussion on intrinsic motivation, extrinsic rewards should be a supplement to more natural consequences of student accomplishment, such as recognition, positive feedback, other forms of praise, and the satisfaction that accompanies learning and goal attainment. As long as these consequences are abundant, the use of additional group and individual reinforcers should not interfere with intrinsic motivation.

When interventions are needed for noncompliance or misbehavior that the group is not able to resolve for itself (e.g., repeated distraction from the group task, participation to the exclusion of other group members), conferences with students

can be used more readily during group work than during whole-class activities. The teacher can meet individually with one student or a group because other students are engaged in the group activity. Such conferences typically last for less than a minute and consist of feedback to the student or group, along with redirection and a plan for changing the behavior. A brief conference allows the teacher to offer an alternate behavior and to provide feedback on the spot, rather than delaying it so long that it would prove ineffective.

Teachers engage groups in a conference when a group process has broken down. Examples include groups in which students don't ask for or give assistance constructively, make poor progress toward the group's goal, or encounter a problem that they aren't able to overcome. Often, teachers describe their role as that of facilitator or mediator in this type of conference. Although the teacher may provide feedback about the problem and a reality check for the group's perceptions, students are encouraged to solve the problem themselves. Strategies teachers use to facilitate a solution include asking the students to identify the problem, asking them to suggest alternatives, asking for reactions and comments, and calling for the group to select one different approach to try. As a last resort, teachers may offer a solution or change group membership if the problem proves intractable.

■ Student Goals and Participation

Students should be told the purpose of their group work and given directions about how they are to proceed, consistent with the task they are to accomplish. Cohen (1994) makes an important distinction in the nature of group tasks. She summarizes research indicating that the nature of a teacher's directions depends on the degree to which the group's task is structured. For outcomes that are well defined and for which there is a limited range of suitable strategies (e.g., completing a worksheet, performing a specific laboratory procedure, answering comprehension questions, reviewing material presented in a text or by the teacher), teachers can give explicit instructions about steps to follow and can monitor the groups for satisfactory progress. On such tasks, the teacher might prepare a list of steps that should be followed and then display it on a whiteboard or handout. A student can be assigned to monitor, noting when a step has been completed, or the whole group can be asked to keep track of its progress.

However, when the task is less structured, the nature of the product and steps to achieve it are not as evident, nor is there an easily identifiable strategy. Teachers then must be less directive about how the group proceeds. The teacher might delegate some responsibility to the group to decide on procedures and to select appropriate resources. Typically, the goal of such group tasks includes higher-order thinking and problem solving. If directions about how to proceed are too explicit, they might stifle the types of thinking such a task is intended to promote.

Suppose a teacher's goal in assigning the development of a group report is to promote critical thinking and problem solving about the topic. If the teacher is highly directive about how the group is to function and what resources it can use,

the students may simply try to develop a report that satisfies *pro forma* the assignment requirements. If, however, the teacher's directions offer the students latitude, and if responsibility is delegated, there is a better chance that students will draw on their own creativity and be more engaged in the group process. Effectively utilizing cooperative groups requires attention to designing and assigning tasks in ways that allow groups to excel.

■ Who Will I Teach? Encouraging Participation in a Diverse Class

Mr. Esquivel is a new teacher whose third-grade class of 24 students includes 8 children who are English language learners with moderate fluency levels in English and 4 children with learning disabilities in either reading or math. Intending to stimulate participation, Mr. Esquivel began the year with collaborative groups of 4 students for project-based, combined science and social studies content. Nine weeks into the school year, he had to rethink his approach. During the initial group project on weather systems, the teacher observed that lower-achieving students and some of the students with more limited English proficiency did not participate fully. Other students were more dominant during group discussions of content and were much more likely to contribute during planning activities.

After consulting with the other third-grade teachers, Mr. Esquivel decided that he needed to provide more structured interaction in smaller groups to encourage all students to participate and to develop group-work skills. He also wanted students to develop better reading comprehension skills because he had noticed that poor understanding of written materials limited many students' participation. One structured group activity chosen by Mr. Esquivel was a 35- to 40-minute reading activity done in pairs three times per week. Students were matched so that their reading levels were not too disparate. In alternate 5-minute turns, students took the roles of reader or listener/helper and practiced clarifying, questioning, summarizing, and predicting skills.

Mr. Esquivel also began using a variation of think-pair-share (Cooper & Robinson, 2000; Lyman, 1992) during the science/social studies lesson. He would pose a question or problem, and then students were asked to think about the question or problem for a minute before discussing their thinking with a partner. Initially, Mr. Esquivel would ask for volunteers to share their partner's ideas with the class, giving him opportunities to provide support for good listening and feedback about content. After a week of this activity, Mr. Esquivel had students share their ideas in their project groups

after the think-pair portion of the activity. Similar to the reading comprehension activities, the use of think-pair-share provided a structure for all students to participate in pairs. Work in pairs also encouraged students to listen to their partners' ideas, setting the stage for fuller participation in the four-student groups.

Finally, Mr. Esquivel provided students with individual and group "learning log" forms on which they could keep track of work in their four-student project groups. At the end of each group work session, students had 5 minutes to write about what they had learned and worked on during that day's activity. Once each week, students in the group discussed their group's progress on their project and a student "recorder" wrote a brief summary using the group's "learning log."

Pause and Consider

1. What value did Mr. Esquivel place on his observations of student interactions?
2. Why might he emphasize smaller group (paired) interactions after these observations?
3. How might the strategies Mr. Esquivel implements resolve the issue he has noticed?

Many of Mr. Esquivel's students needed group-work activities with structured participation formats in order to develop their confidence to participate in more open-ended activities. The reading comprehension activities conducted in pairs provide frequent opportunities to respond in multiple ways, similar to group-based learning activities such as Reciprocal Teaching (Palinscar, 2013; Palinscar & Brown, 1988) and Peer-Assisted Learning Strategies, or PALS (Saenz, Fuchs, & Fuchs, 2005), which have been found to be effective for diverse student populations that include English language learners and students with learning disabilities. An advantage of these activities is that they give students multiple opportunities to be both helper and receiver, or tutor and tutee. To manage these activities for maximum success, teachers need to choose reading material for the pairs at appropriate levels, and students need instruction and feedback so that student skills in explaining and helping are reinforced. This example also illustrates that there are multiple group formats for cooperative learning that can benefit language learners (McCafferty, Jacobs, & DaSilva Iddings, 2006).

Individual accountability and group interdependence are more important in the four-student group project activities. The use of "learning log" forms for individuals and the group will promote these characteristics. On the individual form, each student will summarize what he or she has done in different topical areas

important for learning. The group “learning log” form can be completed as a group self-evaluation activity. The rubric for the form along with examples can be discussed with the whole class. Setting aside some time and asking each group to self-evaluate its processes and progress toward a goal (e.g., a group report or product) is an excellent way to encourage interdependence.

■ Chapter Summary

Use of cooperative learning groups in the classroom can increase student participation and engagement and simultaneously teach content and interpersonal skills. However, such groups can also be sources of difficulty if not managed effectively. Managing cooperative learning groups requires effective planning, clear expectations, monitoring, facilitating, and guiding in order to intervene as needed. Teacher interventions support group problem solving and assist student development of group-work skills. These skills include social skills (e.g., sharing, active listening); explanatory skills (e.g., demonstrating, summarizing); and leadership skills (e.g., planning, delegating). Like the beginning of the school year, the initial use of cooperative learning groups requires thorough planning that includes preparation for room arrangement, group structure, group tasks, group skill instruction, student participation, communication, the roles of individual students, the development of group coherence, appropriate interventions for both individual and group struggles, and rewards for individuals as well as groups. Thorough planning can also maximize the effective use of cooperative learning groups for diverse classrooms.

■ Further Reading

beyondpenguins.ehe.osu.edu/issue/earths-changing-surface/cooperative-learning-an-oldie-but-a-goodie

This website provides good information about basic formats for group learning activities.

Gillies, R. (2015). Small-group work: Developments in research. In E. T. Emmer & E. J. Sabornie (Eds.), *Handbook of classroom management* (2nd ed., pp. 261–280). New York: Routledge.

This chapter considers recent research on how best to structure groups to facilitate student learning and interaction. Strategies that promote student discourse in groups are highlighted.

Gillies, R. M. (2007). *Cooperative learning: Integrating theory and practice*. Los Angeles: Sage.

The author presents numerous case studies and a thorough description of cooperative learning and strategies for implementation. The book brings together a range of powerful teaching strategies connected to students taking responsibility for their own learning and the learning of others.

Johnson, D. W., & Johnson, F. P. (2013). *Joining together: Group theory and group skills* (11th ed.). Boston: Allyn & Bacon.

This text presents a broad, integrative overview of group dynamics in a well-researched, readable, and experiential format. It introduces the theory and research findings on how to make groups effective and build skills required to apply that research to practice.

www.co-operation.org

This website for the Cooperative Learning Institute gives detailed information about cooperative learning and how it is accomplished.

■ Suggested Activities

1. Return to this chapter's vignettes of Mr. Stockton, Mrs. Walker, Mr. Galvan, Ms. Frank, and Mr. Esquivel. Discuss with a partner what unique management was required for these teachers' use of cooperative learning.
2. Observe in a classroom using cooperative learning. As you do so, note room arrangement features and classroom routines that support group learning. Use the checklist at the end of the chapter as an observation guide.
3. Choose a lesson (from observation, online, or a teacher's edition) that was designed for an individual or whole-class instructional format. Identify ways to use cooperative learning groups to teach that lesson. Discuss the modifications you would make to incorporate concepts presented in this chapter.
4. In a group, discuss problems associated with fostering individual responsibility in a group-based task, as well as how to give feedback to individuals about academic performance and individual behaviors in the group setting. What are some workable, efficient strategies for enhancing responsibility and providing feedback?
5. Reread Case Study 6.2, which illustrates one teacher's approach to introducing cooperative groups at the beginning of the year. Compare your ideas for *a* and *b* with the key in the Appendix.
 - a. Note concepts described in this chapter that are evident in Ms. James's procedures and strategies. What functions do the associated procedures and strategies serve?
 - b. Are any areas discussed in this chapter not present in Ms. James's classroom during the first three days? Would you suggest introducing them? Why or why not?
 - c. Ms. James teaches in a departmentalized fifth-grade math class. What changes might be appropriate for earlier grades? What changes for different content areas?
6. Review plans for cooperative group lessons by going to the Web (e.g., www.internet4classrooms.com/training/cooperative_learning.htm). Or to find other examples of cooperative group lessons, type "sample cooperative group lesson plans" in a search engine. Share a favorite lesson plan with colleagues. What management issues could arise if you were to teach this lesson? Get feedback from others in your group.

7. Supporters of the use of cooperative learning emphasize the interdependent nature of social life, including work and family settings. They also emphasize the social nature of learning and the importance of interaction in constructing meaning. Some educators and commentators, however, have expressed concerns about overreliance on groups, arguing that group learning wastes time, especially that of gifted students who must help their less able peers. These critics also dislike the focus on group rather than individual performance. What is your position on these issues? Should groups be used more or less frequently in your teaching field? To accomplish which goals? How do your responses reflect your philosophy of education?

■ Checklist: Planning for Cooperative Group Instruction

Check When Complete	Item	Notes
	Beginning Cooperative Learning Groups	
☐	A. How will student seating be arranged?	_____
☐	B. How will individual and group materials and supplies be stored and accessed?	_____
☐	C. What are your expectations for student movement to, from, and during group work?	_____
☐	D. What expectations about talk will you communicate to students?	_____
☐	E. How will you form groups?	_____
☐	F. What group attention signals will be used?	_____
☐	G. Will students have specific roles?	_____
☐	H. How will you build group interdependence?	_____
☐	I. What initial tasks will groups do?	_____
☐	J. Do any group work skills have to be discussed, modeled, or practiced?	_____
	Monitoring Student Work and Behavior	
☐	A. Will group work have individual products, group products, or both?	_____
☐	B. How will individual or group work be assessed?	_____
☐	C. How will you monitor student behavior and work during group activities?	_____

- | | | |
|---------------------------------|---|-------|
| ☐ | D. How will students receive feedback about individual and group performance? | _____ |
| ☐ | E. How will students receive feedback about their behavior in groups? | _____ |
| Interventions for Groups | | |
| ☐ | A. How will you encourage good group-work skills? | _____ |
| ☐ | B. How will you redirect struggling groups? | _____ |
| ☐ | C. How will you redirect individual students? | _____ |

MyEducationLab *Self-Check 8.1*

MyEducationLab *Self-Check 8.2*

MyEducationLab *Self-Check 8.3*

MyEducationLab *Application Exercise 8.1* Using what you've learned in this chapter, read and respond to this scenario.

MyEducationLab *Application Exercise 8.2* Using what you've learned in this chapter, view the video and respond to the questions.



MyEducationLab *Application Exercise 8.3* Using what you've learned in this chapter, view the video and respond to the questions.



MyEducationLab *Application Exercise 8.4* Using what you've learned in this chapter, read and respond to this scenario.

MyEducationLab *Application Exercise 8.5* Using what you've learned in this chapter, view the video and respond to the questions.



MyEducationLab *Application Exercise 8.6* Using what you've learned in this chapter, view the video and respond to the questions.

