PART **ONE**

TEACHING WITH GAMES

CHAPTER **ONE**

How Games Can Promote Learning

> Many people think of learning as "hard work."
> Learning, as great teachers have known throughout the ages,
> does not *feel* like work when you're having fun.
>
> —Marc Prensky, *Digital Game-Based Learning*

Teachers compete against a world of entertaining distractions in which the best instructional programming seems to incorporate a prescribed mix of eye candy, puppets, storytelling, cartoons, and music. This is a tough act to follow! But mass media cannot deal with our students' needs on a daily and continuing basis. We all know what our students need in terms of curriculum and application, but sometimes we need help in creating the appropriate education-to-entertainment mix that meets their needs on a day-to-day basis.

As educators and parents, we are always looking for ways to engage our students and our children with the classroom topic. Our lessons are not "work" to us, and we certainly don't want them to be "work" to our students. We want our students to *want* to know

more about the topic, to become vested in their own learning experience—connecting their own dots and experiencing their own ideas.

The twenty-five games in this book bring students into the learning arena. Each game has a playful feature that intrigues students and transforms them into players who interact with the game format. Once involved in the play of the game, each player actively interacts with the topic and also demonstrates skills in problem solving, creativity, and group dynamics. These games are powerful tools that extend the invitation to all players to "come on in, the learning's fine."

GAMES AND INDIVIDUAL LEARNING STYLES

Each student has a personal preference for how she receives, interprets, and understands information. Michael Grinder, in his book *Righting the Education Conveyor Belt,* divides learners into three main types—visual, auditory, and kinesthetic. As educators we hope to successfully address all three types of learners each day and with each lesson. Games are an amicable way for an educator to present material and assess material learned, in a way that appeals to all her students. Games also help you maximize each student's learning potential. Games help everyone win.

Here are the learning types and the ways games satisfy each type:

- *Visual learners.* Reflective of our visual age, many of our students are visual learners, reacting favorably to reading assignments, pictures, wall charts, overheads, videos, worksheets, game sheets, and other visual media. To these students the props, game sheets, and visual sequences enacted during a game create a visual experience that can be recalled to reinforce the items or concepts covered in the activity.
- *Auditory learners.* Many students react favorably to music, oral stories, reading aloud, class sing-alongs, sounds, class discussions, and ongoing dialogue. For these students the oral directions in games, repeated episodes of question-and-response, and ongoing discussions create a memorable experience.

- *Kinesthetic learners.* Many students prefer to be involved in the learning experience through touch and interaction, as occurs during game play. They like tactile experiences, such as touching ordinary game items like game sheets, pencils, and markers, and may especially enjoy touching special game props, such as balloons, trash balls, chips, letter cards, question cards, and so forth. The actual physical movement involved in certain games is also important for these learners. They will enjoy the out-of-the-chair games. These students especially enjoy interacting with the other students during the socialization required in a competitive game environment. Students become players, and players become teams during the surge of energy and adrenaline that occurs during game play.

Learning types can also be expressed as internal and external styles.

- *Internal learners.* These learners prefer working alone to create a product or solution—they enjoy reflecting and then working out the solutions in their heads before presenting an answer. Games encourage and reward the type of reflection and thought that is needed to provide the best answers.
- *External learners.* These learners are very social and thrive on group collaboration and interaction. They work well with others and are natural leaders. Games give these students a way to socialize, yet still remain on task with their learning goals. Games also provide an opportunity for these students to test out their leadership skills in a safe environment.

HOW GAMES BRING LEARNING TO YOUR CLASSROOM

Games deliver a welcome variation to the tell-and-test classroom format. The games in this book will make your lessons more enticing and motivate your students to learn more and, more important, *enjoy* learning more. These games can be adapted very easily to most themes and subjects that your school's curriculum has outlined. As an educator, you have goals for yourself, to tap into each child's *zone* where he gets excited about learning and has continued moments of success that drive him to undertake further challenges.

Students have goals for themselves, too—they want to succeed, they want to do well in school, and they want to learn the best they can. Games help satisfy everyone's goals. They keep the curriculum fresh and interesting, which is key to motivating future learning.

Here are fourteen ways games bring your curriculum to your audience:

1. *Games are experiential.* Today's student needs to do and to try things on her own. These games bring her into direct contact with the topic; she will actively interact with your information wrapped in a game. Games also allow you to observe her real-time behavior.

2. *Games allow special tutoring for one or two.* On occasion you need to work with only one or two students. Games can be customized with almost any topic and used in the home or classroom for special tutoring sessions. You will find additional tips on how to use each game in this book in the "Teacher's Notes" and "Customizing" sections.

3. *Games provide choices for your classroom.* Educators sometimes feel weighed down by assigned curricula and audiences. Games allow you to add variety and flexibility to your teaching menus. Here is a brief list of your classroom choices with games:

   - In-chair or out-of-chair play
   - Table, floor, or wall play
   - In-class or learning center activities
   - Small- or large-group play
   - Teacher or student scoring
   - In-class or take-home assignments
   - Individual or team play
   - Introduction or review of material
   - Open-book or closed-book play
   - Inside or outside play

4. *Games reinforce learning.* Games give you playful ways to present and represent material to your students. During this play, your students can practice and demonstrate what they have learned from lecture and readings.

5. *Games provide immediate feedback.* Students want and need feedback on their performance. Games give students immediate feedback on the quality of their input—with appropriate corrective feedback. This can become an invaluable learning opportunity.

6. *Games improve test-taking skills.* Because of the playful challenge inherent in them, games serve as excellent practice for test taking. They expose students to a variety of question areas and formats, and postgame discussion can focus on test-taking tips from both the teacher and fellow students.

7. *Game playing shows that classroom energy is good.* Sometimes the educator has to deal with the energy that children bring into the classroom. Using games reinforces the concept that energy is a good thing and that the classroom is a good place to expend energy. In addition, games can bring students' focus back to the curriculum following active play periods such as recess.

8. *Games can introduce new or difficult material.* Games have an unparalleled facility to introduce new or difficult material to willing participants. Because the game format is playful, the inherent challenge of new or difficult material is much less threatening than it is ordinarily. During game play the seeming unsolvable question is "just part of the game." And educators can use the window following a correct response to successfully introduce new information. One method, for example, is to give an in-class assignment on a new reading. After ten minutes of individual work, bring students into small groups to share their understanding of the material.

9. *Games complement reading assignments.* Games work very well to complement in-class or at-home reading. Use game sheets as homework guides or use in-class question-and-answer sheets.

10. *Games improve teamwork.* Because games are real-time activities that bring students into teams, they train students in the rules of working together as a team and underscore the value of team collaboration.

11. *Games teach playing within the rules.* Games continually reinforce the concept that the only way to win is to play within the rules. If an instance of "fair play" or "cheating" is aired, the postgame discussion can deal with issues of cooperation and honesty.

12. *Games foster both individual and team achievement.* Games underscore the importance of both the individual and the team by giving the student a chance to work alone and then adding the dimension of bringing him into a small group to share ideas.

13. *Games reinforce and improve multitasking.* Games allow students, individually or in groups, to experience and practice multiskill tasks, such as bouncing a balloon while responding to a series of questions. The pressure created by game play helps build problem-solving skills and promotes creativity.

14. *Games can replace drill work.* Games can replace the dreaded memorization work required in learning multiplication tables, spelling, and the like. The required repetition can be carried out in a game format. When the students' attention is focused on the play of the game, memorization becomes less of a chore.

FINAL THOUGHTS

Learning games put an end to the myth that the school curriculum has to be content heavy and offer little engagement. Games provide an experiential learning platform that engages the student while delivering content. Games differ from tell-and-test formats because they provide a vehicle that makes every student a willing player and then they involve the student with the content. Even better, games provide real-time experiences that appeal to audi-

tory, visual, and kinesthetic learners. These experiences can be observed and gently measured to ensure that student comprehension meets educators' goals and expectations.

We hope that you now view games as a way to enhance your curriculum. We now invite you to move to the next chapter to learn more about how to select, develop, and set up your own classroom games.

CHAPTER **TWO**

SELECTING AN APPROPRIATE GAME

Come play my classroom game
And see with smiling eyes
The race that is more fun
Than winning or a prize

—Steve Sugar

The next three chapters are designed to assist you to select and customize *any* game—from this book or from your own library—with your own material. Use these chapters as a guide to and reminder of the steps you must consider in the setup, play, and closure of your own classroom game. After conducting the game, take notes on what worked well and what needed improvement; this information will guide your next use of this kind of learning experience.

Remember, these are your learning games, and they need your customizing in both content and implementation to meet your specific needs in terms of the age, size, and level of your audience.

Consider the following information when selecting a game for your learners.

TARGET AUDIENCE

One of the most important considerations is your target audience. Your game must reflect their knowledge, skills, and abilities.

Games can evoke powerful learning. It begins when the student, now a player, is challenged with the information that provokes a search for the answer. When the correct answer is aired, the learning is immediately reinforced. This learning transfer happens over and over during the game. This *moment of learning* is not only powerful but often remains long after the learning event or game has been completed. Three dimensions of your target audience are level of play, number of players, and class size.

Level of Play

As you would expect, game play varies with the age of the audience in terms of the challenge of the material, the complexity of the rules, and the time of play. To assist you in sorting the games for your needs and audience, we have divided the potential audience into three groups with some distinct needs: grades K–2, grades 3–6, and grades 7–8.

- *Grades K–2.* Learning games for this group should focus on behavioral as well as intellectual skills. Children at this age may still be in the egocentric stage and are just beginning to be introduced to group play. This may make group work a challenge for the young student. Children will learn what games and group play mean overall—that games have winners, contain an element of challenge, and encourage competition. Using teams of fewer than five and simple concepts at the outset of game play allow children to focus on the rules of play. As the concept of a learning game is understood, you can build in additional task complexity.
- *Grades 3–6.* The focus for this audience continues to be how to work cooperatively in groups, but you can also put more emphasis on course curriculum. With students of this age it is developmentally appropriate to move them into larger teams. At this

age students will also become very familiar with the concept of testing. Teachers can use games to teach their students about the content and the format of a test—easing their students into formal testing in a friendly environment.

- *Grades 7–8.* Learning games for this group can be expanded to familiarize students with written testing procedures, oral and written directions, forming and working in teams, individual and group problem-solving skills, and individual critical thinking skills.

Number of Players

When games are used in the classroom, any number can play. Although many games seem best suited for a small number of players, the intrigue and challenge of play invites the involvement of larger groups of participants. Interaction with the play of the game is vital because it brings your students into active contact with the topic.

Participation in a team is an important element of the game experience—it immerses students in a collaborative learning environment. Teams not only present a collective approach to problem solving but also reduce the threat students might feel during a question-and-response period. If an individual responds incorrectly, she may feel embarrassed or unprepared. If the team responds incorrectly, team members have a mixed experience of both disappointment and discovery. Working in teams also shows players that all learning does not have to come from the teacher.

The size of a good working team varies from two to seven players. Teams usually function better with an odd number of players, such as three, five, or seven. Try to use three-member teams unless the game rules indicate otherwise. Using three players allows all players to get involved in the responses and other aspects of game play.

Size of Class

The size of your class requires you to vary the focus of your control. In smaller groups you will be able to reinforce the topic during presentation of the question-and-response material. The natural energies and distractions of larger classes require more maintenance and direct control.

- *Group size of 1 to 2.* This *very small* group requires one-on-one skills from the educator and a game format that can be adapted to one-on-one play. The contest pits the player or players against a preset time or score. Feedback can be tailored to the student—either in the form of an immediate score or as a mix of score and tutoring.
- *Group size of 3 to 14.* This *small* group allows a casual game atmosphere in which the teacher and students participate at a high level. In a small group there is time to go over each question, reach in-depth closure, and ensure each child understands the material. For a group of three to five players, consider having the students run the group, using the game as a learning center activity.
- *Group size of 15 to 25.* A *medium* group requires greater class management skills. The teacher must decide whether she will run one game for the entire class or break the class into teams for whole-group games—perhaps two to four games for this medium class size. Conducting multiple games requires you to make preparations for the additional activity, disruption, and noise.
- *Group size of 26 to 46.* A *large* group presents class management problems that require the teacher to decide whether he needs personnel assistance (other classroom monitors) and to plan room logistics that accommodate all the players. One method might be to divide the students into two sets and run the games in two rounds—in the first round one set of students acts as players and the second set acts as observers, and in the second round the roles are reversed. Again, remember that conducting multiple games requires you to make preparations for the additional activity, disruption, and noise.

LEARNING OUTCOMES

Games can reinforce many different behavioral and learning outcomes. Your learning outcome can vary from the reinforcement of the topic to the demonstration of how to participate in a working group. It is important to establish a set of learning objectives—what you want the participants to learn or demonstrate during and after playing the game. Then you can evaluate how the game met your expectations.

Games are excellent vehicles for learners to demonstrate the following skills and abilities, all within the friendly and competitive game environment:

- Understanding of the concepts of rules, cooperative play, and winning and losing.
- Understanding of the classroom material.
- Application of concepts and principles found in the classroom material.
- Problem solving and strategizing.

PLAYING TIME

Time of play is always a critical issue. Game play represents only part of the total classroom time required. The total learning experience is a three-part process of setup, game play, and closure.

- *Setup time: approximately 20 percent of total.* During this time, you establish the game environment by preparing the room, distributing game materials, dividing learners into teams, and reviewing the rules of play.
- *Game playing time: approximately 60 percent of total.* This is the actual playing of the game, including the start and stop of game play, clarifying questions about rules or content, validation and elaboration of correct responses, and declaring winners.

- *Closure time: approximately 20 percent of total.* This portion of the time is for processing game content and player conduct. During this time the teacher brings the class "back to the classroom" and revisits the learning concepts covered during game play.

Teachers must plan for a *total* learning experience, considering several factors including the complexity of the topic, time required for setup and closure, time of day, and even the attention span of the participants. Because of these factors, all the games in this book are designed to be played in fifty minutes or less. Of course, if you find that a game generates a highly motivating environment, you may extend the time of play by conducting additional rounds or adding supplemental questions or tasks.

THE WHOLE COURSE GAME

When a particular game proves both popular and effective, consider reusing it as appropriate throughout the entire school semester or year. This *whole course* technique allows you to reintroduce a game experience that is familiar to both student and teacher. Advantages of a whole course game are

- Immediate acceptance of a game format that has already proven successful in reinforcing learning or behavior outcomes.
- Familiarity with the rules and roles involved in game play.
- Immediate focus on content in the form of game questions and situations.
- Readily available game accessories from previous play and easier setup for game play.
- Ease of updating to match your current curriculum requirements.

GAME VARIATIONS

Once you have selected a game and played it with your students, you may want to modify one or more of these game format elements to meet your classroom needs.

- *Class size.* Most games in this book are designed to accommodate four to twelve players. Modifications should be made to accommodate groups larger than twelve or to simplify rules and question material to play with one or two players.

  1–2 players. The teacher directly participates in the administration and scoring of the game. Revise the competition process by substituting standard scores or times in place of other teams' performance.

  3–14 players. Little or no modification is needed for this small group.

  15–25 players. Modify for medium groups by allowing more time for game play, preparing additional materials, and revisiting your logistics to make sure your classroom can accommodate the requirements of the game.

  26–46 players. Major modifications are required for large groups to ensure that players understand and follow the rules and that the dynamics of game play do not overwhelm the playing area. Many teachers have found that using one or two assistants—especially in the first run of the game—helps with crowd control and speeds up setup and closure.

- *Time of play.* Expand or contract the total time allowed for the entire game depending on the number of rounds or questions or the amount of material you wish to cover in the time allowed. The rule of thumb is to expand the playing time for groups over fifteen; expand topic coverage for groups under five.

- *Focus of the task.* Adjust the levels of competition and cooperation or encourage extra teamwork or creativity, and the like.

  Grades K–2. The focus should be on the manner of play, such as following the rules and demonstrating appropriate behavior, as well as on providing the correct responses. The concepts of winning and losing are introduced at this level.

  Grades 3–6. Students should understand how to play games. The focus is on demonstrating an understanding of the topic as well as on demonstrating appropriate game and social behavior including sportsmanship—how to be a *good winner* as well as a *good loser.*

  Grades 7–8. In addition to answering questions on the topic, students can be challenged with problem-solving and critical thinking tasks. The teacher may ask for greater student involvement in conducting and observing the game and even in writing questions for the game.

- *Scoring procedure.* Revise rewards and penalties as necessary.

These elements are a starting point for modifying games to suit your particular educational purpose. Each of the game descriptions in this book provides further, specific recommendations for adjustments to the four elements of class size, time of play, focus of the task, and scoring procedure.

FINAL THOUGHTS

Choosing the right game for your classroom is an important first step toward a successful game experience. We now invite you to review guidelines for *loading your game,* that is, placing your content into the game format. We have found that most teachers are familiar with many of these guidelines but appreciate the step-by-step process as a reminder.

CHAPTER **THREE**

DEVELOPING GAME CONTENT

> The biggest contributing factor to a game's success is what the teacher does to prepare the game for classroom play.
>
> —Karen Lawson, *The Trainer's Handbook*

The content material—in the form of questions and situations—is the "heart" of the game. If the selected game format is successful in driving students' interest in the content, then it is up to the quality of the questions to deliver the learning experience.

DESIRED OBJECTIVES

Review your learning objectives. What do you want the students to learn from the game play? The games in this book are best suited for the review of information by recounting specific data and identifying required items.

LOADING YOUR GAME

Loading, or placing your content into the game, is a threefold process of selection, translation, and incorporation.

1. Select suitable information items to present during game play. These items, usually found in your lesson plan, lecture, and readings, can be featured as individual points of learning.
2. Translate these items into game-sized information nuggets. Turn them into short questions, mini-case studies, or situations. As you write out each question or situation, also note the preferred response, the rationale for that response (for elaboration during the answer period), and the reference source (for your own documentation and use).
3. Incorporate the questions or situations into the game format by transferring them to individual question cards or multiple-item question sheets. Many teachers find that noting the topic, lesson, and date on the question sheets reminds them how these questions were used and assists them in updating the material when they use the game again later.

The following loading techniques are helpful in selecting and translating material for the game format. You can use them individually or in a mix.

The Review Test

This is the most popular loading technique among teachers. It has three steps:

1. Develop thirty to fifty test items that embody the most important concepts and facts of the lesson module.
2. Place the items in an order that creates a conceptual flow. Some teachers, however, prefer to use a random sequence of items to represent the "luck of the draw" more typical of game play.
3. Assign values to the questions as necessary. Assigning additional points to an important fact or concept underscores its importance in your curriculum.

Information Triage

When using this loading technique, you review your topic information and highlight important items and facts. Revisit your information, and sort the material into *keep* and *drop* categories. Repeat the process until you have thirty to fifty items. Revisit your items and place them in an order that creates a conceptual (or random) flow. Assign values to the questions as necessary.

Zoom In-Zoom Out

Remove yourself, or *zoom out,* from your material to gain a holistic overview. What is it that you want your students to demonstrate during the course of a game? Then *zoom in* on specific situations or questions that illustrate your learning points. Continue this technique until you generate a tapestry of learning items that reinforce and assess the students' understanding of learning concepts. Place the items in an order that creates a conceptual (or random) flow, and assign values to the questions as necessary.

WRITING QUESTIONS

Appropriately written questions add to both the learning and fun of the game. Old tests are helpful when writing questions, as are the test banks that accompany classroom texts. Another question development strategy is to ask the older students to write questions for the game. Teachers have found that student-developed questions not only add to the question bank but also provide two important student insights into the material—what the students feel is important and what the students do not understand.

Question-Writing Tips

Here are some reminders for developing information items for your classroom game.

- Write questions in a conversational tone. Because game questions are usually read aloud, this helps the flow of the game.
- Write closed-ended questions, questions that focus on one response. This ensures that the requested information and its rationale are covered in the question-and-response format.
- Focus each question on one fact. This keeps the information precise and brief. If needed, use several questions to ensure that a concept is covered adequately.
- Be brief. Use simple wording for questions and encourage brief answers. As a rule, questions should contain less than thirty-five words.
- Take advantage of the moment of learning that follows a correct answer. After the correct response is presented, players are usually curious about why this answer is the correct response, so give them the rationale for the answer at this time. This immediate feedback is a feature of a good learning experience.
- Develop a review question to preview question mix of three to one. A game is an excellent vehicle for presenting new material. Question material new to the audience can be considered part of the randomness of play. The rule of thumb is to create three questions that review material already covered for every one question that previews upcoming material. This not only creates a good question mix but also piques interest in new topics.
- Mix the difficulty. Try for a correct response rate of 50 percent by creating a question difficulty mix of one-three-one—one challenging question, three moderate questions, and one easy question. Introduce the game with the easy and moderate questions to help new players feel comfortable with the game play and content. As players become more comfortable with the rules and roles of the game, they can focus on more challenging questions.

- Number each question. This helps you with your question count and gives you a way to quickly identify and review questions that may require adjustment, deletion, or updating.

Sample Question Formats

Teachers are very proficient question writers; it is our way to challenge, test, and review information. Our question-writing skill makes us natural development resources for any classroom game. The following list of sample question formats is meant to be a reminder and a guide to you about the different ways you can deliver your content wrapped in a game format.

Note that it is very important that you state or restate the complete response when you validate a correct response. This reinforcement encourages greater understanding, internalization, and application of the information.

- *Direct.* This type of question requires players to identify a person, place, or thing. Be sure to include enough information in the question that players can provide the proper answer.

  Q: Name one of the three primary colors.

  A: Accept any one of the following: red, yellow, or blue. (If the student responds, "blue," verify the correctness of the response and then elaborate on it: "Blue is one of the three primary colors. The other two primary colors are red and yellow.")

- *Fill-in-the-blank.* This question requires the player to supply the information required by a blank space. This format is a little simpler than the direct question because you specify more precisely what is expected in the blank space.

  Q: The three primary colors are red, yellow, and _____.

  A: Blue. (Restate: "The three primary colors are red, yellow, and blue.")

- *Multiple choice.* This format presents the correct response along with two distracting responses. This format can make a difficult item easier because it presents a limited choice of answers to the player. Questions should focus on no more than three choices; four (or more) choices can be confusing and slow down play.

  Q: Which of the following is *not* one of the three primary colors?

  a. Red

  b. Yellow

  c. Green

  A: Green. (The other primary color is blue. Restate: "The three primary colors are red, yellow, and blue.")

- *True or false.* This is the easiest kind of question to prepare and answer, and it offers players a fifty-fifty chance to respond correctly. It can help players ease into competition. Limit this question format to fewer than 25 percent of all the game questions, however, to keep the game from becoming a flip-of-the-coin match.

  Q: The three primary colors are red, green, and yellow. True or false?

  A: False. (Green is not a primary color. Restate: "The three primary colors are red, yellow, and blue.")

- *Partial listing.* This question format requires the identification of multiple items in a category or listing. Ask for some but not all of the items. That way you can underscore the importance of the complete list without frustrating players by asking them to recall the complete list. Read the total list when the answer is given.

  Q: Name two of the three primary colors.

  A: Accept any two of the three: red, yellow, and blue. (Restate: "The three primary colors are red, yellow, and blue.")

- *Demonstration.* This format requires the player to perform a particular skill or task.

  Q: Using any or all of the primary colors on the palette, create the color green.

  A: The player mixes blue and yellow to get green. The teacher can validate the color and then compare it to a color on a prepared palette. The teacher may wish to demonstrate a variety of ways to mix and use colors on the palette.

LESSON MATERIAL

The use of a learning game can introduce the student to a topic or concept, demonstrate how much the student understands about that topic, underscore appropriate behavioral traits, or simply encourage further interest in classroom proceedings. You may wish to develop appropriate lesson materials to elaborate your topic in the context of the game, such as an introductory or closing lecture, visual charts or posters, models, a hands-on demonstration, or supplemental readings.

Using a variety of media can also add to the total learning experience. Consider such media as music, videotapes, posters, newspaper or magazine articles, models, Internet materials or Web pages, and in-class demonstrations.

Games Used to Reinforce Readings

For older students, develop a handout that is more than just take-home information from the presentation and that contains ideas and resources for both student and parent. If such handouts or homework assignments are distributed before the game, game play will then reward those students who preread the assigned material. Games have been known to encourage the completion of out-of-class assignments—no player likes to let her team down during game play.

Game Sheets Used as Homework

Another way to encourage at-home learning is to create a *working* handout by adapting a game sheet from one of this book's games, such as Dilemma, Guggenheim, or Scavenger Hunt. Working from the reading assignment, students develop as many responses as possible. The next day students reinforce this assignment by participating in ongoing work groups to share and compare their game sheet responses. This is a very powerful strategy because, once again, students do not want to let down the rest of their team.

Classroom Reading Used as an Instant Game

Many teachers have found that using a game instantly turns an ordinary classroom reading into an event. First, hand out the reading to your students and give them five to ten minutes to read over the material. Then form the students into groups and conduct a quiz in the form of a game. This will underscore the material and bring renewed interest to future classroom readings.

FINAL THOUGHTS

This chapter has introduced the basics for developing your game content. Even though each classroom game introduces some additional work in the areas of development, setup, and play, you will find that the payoff—in terms of student engagement and learning—makes the extra effort well worth it. And of course, each game will be easier to develop and play in the future.

This book also offers the following two resources to help you use games in response to classroom challenges:

- Appendix Two: Sample Game Lessons. This appendix presents two topic- and grade-related challenges and a game plan that walks you through the preparation of a game that specifically meets each challenge.

- Appendix Three: Games for Special Situations. This appendix suggests games you can use to deal with five classroom challenges—the first week, test preparation, material review, active days, and learning centers.

In the next chapter we discuss the physical and mental preparations needed to set up and conduct a classroom game.

CHAPTER **FOUR**

SETTING UP AND RUNNING A GAME

> Be flexible. Although games and activities have rules, don't become obsessed with them. An important requirement for an effective game experience is to maintain your sense of humor and to take serious things playfully.
>
> —Sivasailam Thiagarajan and Glenn Parker, *Teamwork and Team Play*

This chapter focuses on the physical and mental preparation needed to set up and conduct a classroom game. It covers assembling the game accessories, the pregame setup, game play, and closure.

GAME ACCESSORIES

Game accessories are materials, equipment, or props that create an appropriate learning game environment. Here are some reminder lists, along with hints on using these accessories during a game.

Audiovisual Equipment

- *Chalkboard.* This standard of the classroom can be used to reinforce key lecture points, display rules of play, state appropriate behavior during game play, keep score, list questions or discussion items, note problems with a game or game equipment, or list comments to be covered during the debriefing. You may also post items on the chalkboard such as posters or newsprint lists of the rules of play or theme charts.
- *Overhead projector.* Overhead slides can be used to reinforce a lecture, display a game format and rules of play, keep score, list key elements of discussion, or list comments and reactions. This tool is especially helpful with large groups. Some teachers even display the game sheet on an overhead to establish the rules and dynamics of game play.
- *Cassette or CD player.* An audio player can be used to provide audio commentary, stories, sing-along choruses, background music, and random times for rounds of play.

Materials

- *Masking tape.* Use masking tape to place charts and posters on walls, place cards on wall charts, mend paper items, secure electrical wires to the floor or wall, and so on.
- *Posters or charts.* Commercial posters or personally developed charts can be used to reinforce the learning and to create a playful game environment. *Theme charts* can underscore concepts from the curriculum or current events or model behavioral expectations.
- *Bulletin boards.* Use bulletin boards to post rules of play or to present "best scores" and other information. Some teachers select a special board both to display game rules and to keep game supplies handy in pockets made from cardboard, envelopes, or library cardholders. You can dedicate the board to a unit of study, encouraging students to refer to the information posted on the board during the game.

- *Newsprint easels.* Newsprint can be used to post directions or to record comments and observations made during the run of the game.

  Note: Rules of play and other lists and charts can be taken down and stored for future use. This not only models the recycling of class materials but shortens the setup time for future play. It even allows the teacher to introduce a game at a moment's notice.

- *Whiteboard (dry-erase board).* This alternative to the chalkboard can also be used to hang posters or charts. Some teachers may want to create a game board using the whiteboard, attaching sticky magnets to the back of item cards or other game props.

Special Props

- *Timer.* Use a stopwatch or kitchen timer to time rounds, the entire play of the game, or question-and-answer periods.

- *Noisemaker.* The natural energy of game play can drown out even the most vigorous voice. An alternate way of getting attention can add to the playful game environment as well as save your voice. The noisemaker can alert players when to start, stop, offer a correct response, return from a break, and so on. Some commonly found noisemakers are call bells (think of room service at a hotel), chimes, dinner bells, whistles, train whistles, and kazoos.

- *Name cards.* Use these cards to bolster team identities or to identify processes of the game, such as the special tasks in Medley Relay. You can make these cards by folding five-by-eight-inch cover stock in half.

- *Question and direction cards.* A set of question cards that students can draw from is used in teacher-controlled games and card games. However, many teachers have found that printing out question cards is time consuming and that due to changes in curriculum the cards are short-lived. The preferred way to use these small cards is for giving specific directions, such as "Stop Play," or for assigning point values to questions read from a prepared list.

- *Raffle tickets.* Use these tickets for prize drawings during or after game play. Tickets can be created from portions of three-by-five-inch index cards or purchased in rolls from teacher supply catalogues and stores. Some teachers like to collect a raffle ticket from everyone in the class at the beginning of the period. Then winning players and teams get to put in additional tickets. This gives everyone a chance to win the drawing for the prize, with the game winners receiving a slight edge.
- *Miscellaneous containers.* Depending on the requirements of the game, the containers needed can range from bowls to paper bags to trash cans to egg cartons to milk cartons. In Grab Bag a paper bag makes an excellent container for the prize tickets. In Trash Ball an ordinary trash can serves as a basketball receptacle. In Medley Relay gallon milk and empty egg containers are used as objects passed around a player circle in a relay-style race.
- *Miscellaneous items.* Sometimes a game may require miscellaneous items such as balloons, milk cartons, game sheet markers, bubble makers, and so forth. The criteria for any item to be used in a game for children are availability, convenience (easy to find and store), cost effectiveness, familiarity to the player, and safety, especially when used in the presence of younger children.
- *Markers.* Some games require a marker to temporarily cover a space or to indicate status on a game sheet. Traditionally, markers are pawns or chips. But almost anything can be used as a marker, such as pieces of felt, bits of construction paper, pebbles, pennies or other coins, paper clips, buttons, Magic Marker tops, and so forth.
- *Pass, juggle, or throw items.* These items vary from crumpled paper, used in Trash Ball, to balloons, used in Balloon Juggle, to odd-sized containers, used in Medley Relay. These items must be safe, easy to locate, and cost effective.

  Note: Use caution when introducing balloons. Be careful that children, especially the younger set, do not bite the balloons or poke objects into them. A bursting balloon can cause problems, especially when near the nose and mouth of a child.

- *Bubble makers.* In the game Bubbles, these simple devices introduce the wonder of bubbles as part of a learning experience. The teacher may want to keep the bubbles confined to a specific area with a ready supply of wipe-up cloths or have the students play the game on a specially prepared area, such as a spread-out drop cloth.

GAME SETUP

Setup time is the critical period for readying the classroom and yourself—especially for the first playing of the game. Take this time to mentally and physically revisit your play area as you walk through your game. Conduct an inspection of the room, checking for any hazards to safety or obstacles that will inhibit play. Set up or move tables and chairs, as required. Place posters, banners, worksheets, or wall charts containing suitable quotations or artwork. Later, post rules of play or other materials as required.

After you feel satisfied with the safety and logistics of the room, take on the perspective of your students as you enter the room. Is the room visually attractive? Does it anticipate a joyful game experience?

Set aside one table or area as *your* resource area. Take time to organize this table or area with the game sheets and accessories so you will have easy access to them during game play.

- Lay out additional reference materials as required.
- Lay out game sheets and score sheets for distribution before and during the games.
- Lay out the necessary accessories—such as noisemakers, masking tape, question cards, markers, and prizes.

Take this time to ensure that the equipment and materials are appropriate and prepared. For example, attend to these items:

- *Chalkboard.* Make sure that the chalkboard is clean and that you have sufficient white and colored chalk.
- *Whiteboard.* Make sure that the board is clean and that you have sufficient water-soluble markers and erasers. Some teachers find it helpful to keep a bottle of a cleaner with ammonia available to clean the board in emergencies.
- *Overhead projector.* Make sure the projector is operable, is focused, has an electric cord sufficiently long and secured to the floor, is placed on a workable stand, and has an extra bulb.
- *Easel and newsprint.* Make sure you have markers and enough sheets of paper to display the rules, record student comments, or present additional information.
- *Tables and chairs.* Take this time to set up or remove tables and chairs as required.

PRELIMINARIES

These *preliminaries* are the in-class procedures prior to actual game play that help create the structure for the game and a game play environment. They may include these activities:

- Dividing the class into subgroups or teams.
- Seating each team at its own table.
- Getting players lined up in established game play areas.
- Having teams select team names.
- Getting teams to assign roles to players and establishing procedures for knowing which team member should respond to a question.
- Distributing game materials, including game sheets and paper and pencils.

- Distributing score sheets, question or problem sheets, and other game materials and props.
- Displaying game information and player instructions.

Next, introduce the game to the students, describing the rules. This introduction, along with an interesting classroom layout, should help motivate your students to play. Students often reflect and take on the enthusiasm displayed by the teacher.

The teacher may also want to ask if there are any questions about the rules. The teacher may also ask one or more students to restate the rules to ensure that the players understand what is expected of them.

Here is a sample introduction for the game Alphabet Soup.

> Good morning, I want to briefly go over the game Alphabet Soup. The game objective is to score the most points by putting together the letter cards assigned to your team. The game is played in rounds. Each round consists of a team getting five letter cards and then putting together as many words using these cards as the team members can in the time allowed. When time is called, each team is awarded points for each word. After each team has played an equal number of rounds, the team with the most points wins.

GAME PLAY

Games are played as described in detail in Part Two. Here is an example, drawing once again on Alphabet Soup.

Round 1. The first team to play, "Team A," assigns the roles of the *letter carriers*—those players who will each hold a letter card—and the "recorder"—the player who writes down each formed word. After the teacher is assured that Team A members understand their assignments, she begins the game. Team A begins forming its first word with the letter cards. The players holding the letter cards arrange themselves in the order of the first word—the first player showing "c," the second player showing "a,"

the third player showing "r," and the fourth player showing "s" to form the four-letter word *cars*. As soon as the recorder writes down this word, the team forms another word. This continues until the three-minute period is over. The teacher collects Team A's list from the recorder.

After receiving Team A's list the teacher should write each word on the chalkboard and elaborate on its validity and value. As with any game situation, expect periodic resistance, defensiveness, or conflict during game play. Remember that even though there may be designated correct and incorrect responses, participants may have other perspectives on what answers are right and what answers are wrong. The disclosure of the correct words is an important moment of learning in which the energy of the game drives students to discover not only *what* was correct but also *why* your selected response is the most appropriate response. The teacher's role is not simply to impose a correct answer but to get the students to sort out their assumptions, and to encourage them to think about the information and concepts presented by the game.

The game is played the same way for all rounds. After each team has played an equal number of rounds, the teacher tallies the point totals and declares one team the winner.

GAME CLOSURE

In the afterglow of the game, students' attention can be refocused on the topic and on any problems the players encountered during game play, such as confusion about the rules or roles, time periods, or even the quality of the questions or the responses.

Competitive Feelings

In the event of very competitive play, you may have to allow your students time to cool down, and you may have to encourage appropriate behavior by both the winners and the losers. This is the

time for your players to transform back into students and to transfer positive learning experiences from the game back to the classroom. You may have to remind your players that the goal was not just to win or get the right answers but also to show that they understood the topic. Also remind your players that all competitive feelings, if any, should stay in the room. For example, one teacher, sensing that too many competitive feelings lingered after a game, selected a nearby trash can and designated it as the receptor of all competitive feelings. After all feelings were "sent" to the trash can, she had the can moved to a "safe" place, and she and the students returned to the after-game discussion.

Reflection

Closure can be extended to the process of helping students to reflect on their experiences in order to develop meaningful learning. Reflection usually takes place immediately after the game experience. This period can include venting, in which students let off steam, their feelings about specific things; making applications of the game and its content to classroom learning; and offering generalizations, such as comments that relate game play and content to real-life behavior.

Journal Writing

Older students can write down their reactions, learned concepts, and observed behavior in a journal. This reinforces writing skills and allows the teacher to revisit the game through the eyes of the student. Where group discussion is limited, a journal allows students to share what they have learned and raise questions about the lesson or game in a one-on-one discussion with the teacher.

More Closure Activities

This period of the game can also be used to do any or all of the following:

- Shift the focus from the game back to the classroom.
- Thank students for their participation and contributions to the success of the game.
- Congratulate the winners or all players on the successful completion of the game.
- Have players congratulate each other for achievements made during the game.
- Tie up loose ends of the game, and resolve any confusion about the rules or questions covered during the game.
- Review and share observations about the game and game play.
- Relate what was learned from the game material and from game play to the classroom topic or overall concepts of the material.
- Distribute certificates or awards.
- Discuss any new information or concepts raised during the game.

FINAL THOUGHTS

Teaching through a game offers you a unique opportunity to match the personality of the game—its ability to evoke playfulness and energy—to the demands of the curriculum and your students. No matter how many times you play the same game, even with the same material and participants, reactions will differ. Each group of students has its own learning thresholds and perceptions of what is new and important. One of your rewards is to experience the joy of discovery along with each set of players.

Remember also that these games can be either used as stand-alone activities—to introduce, teach, review, or test learning—or sequenced with other activities to create a specific learning mix.

Finally, each game description in the following pages offers sample play along with tips on customizing the game for your audience. This should help you select and adapt material for the critical first rounds of play. Then, as you feel more comfortable with the game, you can customize game play further by varying the topics and rules. In addition, be sure to refer to Appendixes One through Four for additional information on selecting and adapting games.

Now we invite you to use these games creatively in your own classroom.

Let the games begin . . .

PART **TWO**

TWENTY-FIVE GAMES