

Students Taking **CHARGE**



An Eye on Education Book

**Inside the Learner-Active,
Technology-Infused Classroom**

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The Big Picture for Your Instructional Design Journey

Shifting Mindsets

Imagine a learning environment in which students pose questions and actively seek answers. They decide how they will use their time; take charge of setting and achieving goals; and work individually to build skills and collaboratively develop solutions to real-world problems. Computer technology is used throughout the day, seamlessly, as students and teachers need it—from handheld devices to laptops to interactive whiteboards. Students walk to a flat-screen monitor on the wall and talk to students in another part of the world. Teachers move around the room, sitting with students who share their accomplishments, asking probing questions and gathering assessment data that will shape tomorrow’s instructional plans. You hear students talking about content; their vocabulary is sophisticated for their grade level; their thinking processes are evident through their discussions and reflections. They are intent on the task at hand, yet not everyone is working on the same thing at the same time. No one is off task; no one is misbehaving. Every now and then you hear a cheer or a student exclaim, “I got it!” as they excitedly dive into the next phase of a project. They pack up certain activities and move on to others without the prompting of the teacher. No one watches the clock; no one wants to leave. This is a snapshot of the *Learner-Active, Technology-Infused Classroom*. Students in this classroom take learning seriously and pursue it vigorously. Teachers in this classroom masterfully craft learning experiences that emanate from authentic problem situations; they facilitate learning, ensuring that each student achieves at the highest level. Parents are partners in the learning process, often via the Internet, working with teachers and students as one cohesive unit to ensure that the students are given the best foundation possible for the rest of their lives.

You may recognize aspects of your own classroom or those of your colleagues. Pockets of innovation exist in schools; it's time to stop celebrating pockets of change, incremental improvements, and isolated innovative teachers. It's time to take bold moves to secure the future of our students and the world.

The Role of Schooling

Schools both serve and form society. They serve society by building in their students the skills, concepts, and information needed to thrive in today's world. When the sundial gave way to the analog clock, people needed new skills. When the slide rule gave way to the calculator, school curriculum changed. The school community must continually consider changes in society, particularly technological changes, and ensure that the curriculum is designed to shape successful world citizens.

In addition to critical subject-area content mastery, students need to build skills in creativity, innovation, critical thinking, problem solving, communication, collaboration, information literacy, technological literacy, initiative, self-direction, socializing, cross-cultural engagement, productivity, leadership, flexibility, adaptability, accountability, and responsibility. How do you build "ility?" Most of these skills cannot be approached as a subject. A student cannot take a class in flexibility and adaptability. These skills that fall outside of subject-area content are acquired based on *how* teachers teach more than *what* they teach.

If schools serve society by *what* they teach, then they form society by *how* they teach. Schools that place a great emphasis on individual competition develop citizens that are well-suited for that, but may not be as able or willing to work collaboratively. Schools that place a great emphasis on project management, time management, and resourcefulness develop citizens that are better prepared to lead self-reliant, productive lives. This is a connection that schools often fail to realize, and it is why teachers and administrators must very carefully develop an ongoing, purposeful, instructional design plan that not only considers the written curriculum—the *why*—but also directs the teaching and learning process in the classroom—the *how*.

Moving Beyond "It's Always Been That Way"

Consider this anecdote I once heard. A mother is cooking a ham dinner. She cuts off the end of the ham, places the larger piece in the pan, and begins to roast it. Her young daughter says, "Mommy, why do you cut off the end of the ham?" Mom responds, "You know, I'm not sure but my mother always did that. Go ask grandma." The young girl goes into the living room and asks her grandmother the same question. The response is, "I don't know; my mom did that so I did too," and she turned to her great-grandmother and

asked why. The elderly woman responded, “Well, otherwise it wouldn’t fit in my roasting pan!”

What a wonderful anecdote for the ills of perpetuating the dominant paradigm of schooling. Teachers always stood in the front of the room when I was in school, so that must be where you stand. We always had textbooks, so they must be a necessary part of school. We’ve always had students write and solve problems on the board, so that must be a necessary component of mathematics instruction. It’s time to think through what schooling looks like and make some significant adjustments to past practices. That’s not to say you discard everything you currently do. Rather, you keep what works and make some adjustments. The important thing is to keep your mind continually open to change and be willing to shift some of your beliefs as to what the teaching and learning process could look like.

Shifting your belief system is not an easy process; it requires unlearning some of what you’ve learned in the past. Authors Ron Heifetz and Marty Linksy (2002) distinguish between technical and adaptive change. Technical change focuses on implementing known solutions to problems. For example, if students are not performing up to your desired level, you might use a rubric to offer them clearly articulated expectations. You learn how to use a rubric, implement its use, and teach others. That’s technical change, which is the focus of most professional development and college courses today in the field of education. Adaptive change focuses on developing solutions to problems for which none yet exists. Designing classrooms to meet a new, emerging generation of learners is a problem for which there can be no available solution, given that students and society are continually changing. Adaptive change requires a change in one’s belief system.

Three Critical Goals

Teachers should have at their core three critical goals for instructional design: engage students in learning; build greater responsibility for student learning; and increase academic rigor.

Engaged Learners

Busy students are not necessarily engaged students, nor are seemingly happy students who are working in groups. Although “hands-on” activities are wonderful, what you truly want are “minds-on” activities. If you assume students are engaged in learning, take a closer look to see if what they are doing is directly related to academically rigorous content and if they are thinking deeply about that content. Suppose third-grade students are learning about the food chain. Consider the following scenarios as we peek into three classrooms:

- ◆ Students are locating information on the food chain from books and the Internet and creating charts to demonstrate their understanding of the food chain.
- ◆ Students are designing a computer presentation on the food chain and are working on adding sounds and transitions to make it more exciting.
- ◆ Students are developing a presentation that considers “what if” a member of the food chain were to become extinct, under what conditions that might happen, and how that would affect the rest of the food chain.

Although all three scenarios cover the content of the food chain, it is important to consider how students spend the bulk of their time. In the first scenario, students are most likely engaged in finding and reporting information. Doing so will lead them to some level of understanding of the food chain, but the work is primarily “regurgitation” of content. The second scenario assumes students have already found their information and are reporting it using a digital presentation, which is a worthy goal. Their engagement, however, is now in the digital presentation software. Again, although the students are focusing on important skills, as the teacher, you must consider what content is the *goal* of instruction. In this case, students are engaged in the use of software, not understanding the food chain. The third scenario has students “grappling” with the content itself—understanding the cause-and-effect relationships that exist and using higher-order thinking to consider future situations. All three of these scenarios might occur when learning about the food chain; the key is the *amount* of time allocated to each. Engaged learners need to be grappling with curricular content in significant ways much of the time, no matter what their ages.

Student Responsibility for Learning

Student responsibility for learning is a concept that most educators embrace but few foster. Teachers are often frustrated that students don’t come to class prepared, haven’t done their homework, and so forth. If you take a closer look at most classrooms, students enter the room and wait for the teacher to tell them what to do; or they follow a “do now” written on the board, that the teacher created. You’ll hear teachers saying phrases like, “clear your desks,” “take out a pen and paper,” “line up at the door,” “quiet down,” “speak up,” and more. Teachers will call on students to speak; distribute materials; give, collect, grade, and return assignments; and tell students what their grades are. In this type of environment, the teacher takes much greater responsibility for learning than do the students.

4 ◆ Students Taking Charge

Imagine a classroom in which students walk through the door; pick up a folder, or log onto a website that includes their current work and a schedule that they developed the prior day; read through comments from the teacher; and start working on activities they decided upon. Students determine what resources they'll need to accomplish their tasks, and they sign up for them, including *small-group mini-lessons* offered by the teacher. They use rubrics to guide their work and assess their own progress; and they tell the teacher how they're doing and what they need to be more successful. The teacher facilitates learning through a carefully structured environment that allows students to take responsibility for the classroom. Student responsibility for learning requires clearly articulated expectations and consequences, structures that students use to meet with success, and guidance and feedback from the teacher.

Academic Rigor

If students are engaged in learning and taking greater responsibility for their own learning, then increasing academic rigor is easy. The battle cry of most schools is to increase test scores, even if scores are already relatively high; but you can't force students to learn. Glasser (1998) purports that students choose to learn based on a sense of belonging, freedom, power, and fun. Sousa (2005) found that for information to move into long-term memory, it must have sense and meaning. Lecturing, drilling, and forcing memorization will not increase learning. It may bring about a small, temporary bump in test scores, but weeks later, the students will have little to show for their work, and little foundation to build upon the following year.

I met with a group of teachers representing second grade through twelfth grade to discuss rethinking instruction. During the discussion, an eleventh-grade teacher commented, "Well not only do I have to concentrate on history, but I have to teach them how to write. I don't know what your curriculum is in middle school, but our eleventh graders can't write in paragraphs!" A middle school language arts teacher quickly defended her curriculum with, "I spend a lot of time on paragraph construction because they come to me with no knowledge; but they leave my classroom with strong writing skills. Our district needs to teach paragraph writing in the elementary grades." A second-grade teacher who happened to have a stack of student stories with her pulled them out and said, "I don't know what you're talking about. My second graders write great paragraphs." We passed around the student writing samples and the upper-grade teachers were incredulous. The first teacher to speak exclaimed, "If they write this well in second grade, what happens to them when they get to high school?!"

Many students can memorize content for the moment. If you engage students' minds in grappling with content through meaningful, authentic

problems, they will build knowledge and understanding for the long-term. If you increase their responsibility for learning, offering them freedom and power, they will be able to accomplish more, not remaining dependent on others to continue moving forward. You can then increase academic rigor through well-crafted assignments, questions, differentiation, collaboration, and more.

The Digital Generation

The Internet has significantly changed how people communicate, work, collaborate, engage in commerce, and think. Educators need to understand how the Web 2.0 world has affected today's students and design classrooms that better suit their learning modalities.

As early as 1998, Don Tapscott described the ten themes of the then-emerging digital (or 'net) generation. They possess a *strong independence and autonomy*, considering they can easily access and challenge information. They reveal an *emotional and intellectual openness*, based on their willingness to post their thoughts and opinions on websites. They are *inclusive*, using technology as a means through which to develop a community of diverse individuals with whom they interact. They believe in *free expression and strong views*, having unparalleled access to information and forums. They are *innovative*, continually looking for ways to improve the world around them. They are *preoccupied with maturity*, seeking to meld into groups of people who are older than they. They engage in *investigations*, willing to surf the Internet in search of the answers they seek. They thrive on *immediacy*, spurred on by the instantaneous connection offered by modern cellular phones and the Internet. They are *sensitive to corporate interest*, skeptical that media messages are designed to serve corporate needs. They are mindful of *authentication and trust*, given that, with the open-architecture of the Internet, they must continually question what they see and hear. Tapscott (2009) later reinforced this, pointing out how these characteristics have been solidified in these students' adult lives. This and future generations of students deserve formal learning environments that honor their unique characteristics.

Consider a few effects of Web 2.0 on the digital generation. In a Web 2.0 world, you:

- ◆ Can post opinions through blogging, share videos, upload podcasts, create personal social networking pages, and more. The result is that your students *thrive on expressing themselves in a variety of ways*.
- ◆ Go to websites and they welcome you, know what you're interested in, and refer to you by name. You create digital avatars

that represent you online. The result is that your students *expect personalization*.

- ◆ Text whom you want, instant message (IM) whom you want, engage in online environments with whom you want, control your computer's desktop, and customize your phone. The result is that your students *demand freedom*.
- ◆ Engage in online, interactive environments with others around the world, socializing, creating, and gaming. The result is that your students *thrive on social interaction*.
- ◆ "Google" people, look up topics on *Wikipedia*, run to an online encyclopedia to learn to pronounce a word, go to the U.N. website to learn about world hunger, check the weather, and get the news. The result is that your students *demand immediate information*—what they want, when they want it.
- ◆ IM several people while you search the Web, engage in an online discussion, watch a television program on computer and text on the phone. The result is that your students *want to be everywhere at once*.
- ◆ Can grieve the loss of others through social networking pages, raise money for starving people in third-world countries, raise money to support taking a stand against genocide in other parts of the world, and organize political events. The result is that your students are *socially aware and active*.

These results speak to the need to design classrooms that are engaging, authentic, differentiated, resource-rich, collaborative, and foster greater student responsibility for learning.

Stories from the Field

Whatever your grade level or subject, you'll want to gain insights as to what learning looks like for your students before and after they enter your classroom. As you read the stories in this book, if your grade level is below the story level, consider what students would need to learn at your level as a prerequisite. If your level is above the story level, consider how the students in the story would be in your classroom. Consider how you could interact with the students and teachers in the stories that are at your grade level, but in a different subject area. Avoid glossing over those stories that are not on your level.

A fifth-grade teacher uses problem-based tasks to drive students into the curriculum through motivating, real-world problems. She has created struc-

tures that allow students to learn from her in small-group and independent settings, through written direction sheets, from one another, and through websites and software. She made a decision to spend only fifteen minutes a day in the front of the room offering the daily “lesson.” Even prior to redesigning her classroom, she was a popular teacher. She presented great lessons that were very interesting to her students, merging humor with content. Still, she decided to heed the brain research and limit her amount of time in the front of the room. One day a student approached her and asked, on behalf of the class, if she would present a lesson on equivalent fractions from 11:10 to 11:25, because the students really needed more information on this topic and were all stuck. She gladly complied. As she moved into her lesson, she was happily surprised by how attentive everyone was. She presented; the students took notes; they responded to her questions and asked their own. She admits she was so excited by how engaged her students were that she failed to end at 11:25 and just kept going. Soon students started looking at the clock and fidgeting. Finally, a student said, “This was a great lesson but we only had until 11:25, and we’ve got to get back to our work schedules.” Imagine a classroom in which students take charge and manage their own time to complete assignments by designing their own schedules. Imagine a classroom in which students take charge and ask the teacher to present lessons that will aid them in problem solving. Welcome to the *Learner-Active, Technology-Infused Classroom*.

A seventh-grade science teacher has been working on making his contact with students more meaningful and focused on grappling with content. On Friday, he had planned to take the students outside with paper airplanes to conduct some physics experiments around flight. In the past, he would stand in the front of the room giving the entire class directions on folding a paper airplane, as all of the students followed along. Realizing this is a lower-order activity, he instead videotaped his hands making the airplane as he offered verbal directions. He set up a video station and instructed students to sign up in groups of three throughout the week to assemble their airplanes. Students reported enjoying this approach. One noted, “You know, sometimes when a teacher is talking you kinda zone out. And you can’t rewind them. Now we can!” Students worked on this independently while the teacher joined other students to discuss the results of their current experiments. Two pairs of students were conducting an experiment on molecular movement that generates heat. They each set up three beakers of water: one cold, one room temperature, and one hot. They then introduced a drop of food coloring in each beaker and watched to see how quickly the water throughout the entire beaker changed color, if at all. The teacher listened to one pair’s description and then mused, “I wonder what would happen if you used yellow food coloring instead of blue.” The students were eager to set up a second experiment and try it. He listened to the other pair’s similar description and then

offered, “I wonder what would happen if you used mineral oil instead of water.” Again, students jumped at the opportunity to see what would happen. Imagine a classroom in which students are engaged in grappling with content, fueled by the teacher asking probing questions. Imagine a classroom in which students are working on different tasks, including some that utilize video to “clone” the teacher. Welcome to another *Learner-Active, Technology-Infused Classroom*.

When I visited a kindergarten classroom, I found students in various locations: five in a carpeted meeting area, on the floor with the teacher, engaging with math manipulatives; some at desks creating ladybugs from construction paper; some reading picture books; and some at interactive whiteboards with peers matching words to pictures. I sat down next to a student who was constructing his ladybug. The conversation went like this:

Me: Hi, what are you working on here?

Student: I’m making a ladybug.

Me: And why are you making a ladybug?

Student: Uh...the teacher is reading us a book about a ladybug.

Me: I see your classmates are working on some other things. Are you doing those, too?

Student: I wanted to do this first, then I have to go to the carpet.

Me: And how do you know when to do these things?

Student (pointing to the board): See the list? I can do them in any order.

Me: Ah, I see. I like your ladybug. I see you so far have five spots on the left side and three on the right? Do ladybugs have the same number of spots on both sides?

Student: Oh no, butterflies are symmetrical; ladybugs are not.

My conversations around the room were similar. Students had three markers with their name and numbers that they posted next to activities on the board to indicate to the teacher their activity choice. The teacher was spending quality time with students on the carpet introducing a new math concept. Students who needed help went to one another with success. Even kindergarten students can take charge of managing their time. Welcome to another *Learner-Active, Technology-Infused Classroom*.

A high school advanced placement (AP) environmental science teacher had her students exploring population pyramids to analyze the patterns of underdeveloped versus developed countries. She posed a problem to her students: Select three countries around the world that are in different stages of development, study their population growth over a period of no fewer than 50 years, generate population pyramids, and offer suggestions as to how each country might stabilize its population. A visitor to the classroom

sees students working in groups, pairs, and individually on a wide variety of tasks. Students are using spreadsheets to load data that will determine the shape of the population pyramid. Advanced students are using computer programs to create simulations that engage in “what if” analysis. Some are brainstorming possibilities; others are researching countries’ backgrounds. The teacher has printed *how-to sheets* for students using computer programs. She posts a list of *small-group mini-lessons* on the board, such as, “An In-Depth Look at Factors Affecting Population Growth” and “Analyzing Population Pyramids,” for which students can sign up to attend. Students are eager to share their findings and insights with one another and move freely around the room doing so. When the bell rings, no one wants to leave class. Welcome to yet another *Learner-Active, Technology-Infused Classroom*.

A Philosophy and Solution

It is important to view the *Learner-Active, Technology-Infused Classroom* as a total philosophy toward teaching and learning, not as one possible method among many that you may use. One cannot be *Learner-Active* in the morning but not in the afternoon. One cannot use this method for some students and something else for others. The *Learner-Active, Technology-Infused Classroom* encompasses many structures and strategies and seeks to provide the best possible learning environment for all students, thus being differentiated in and of itself. Mastering the art of designing a *Learner-Active, Technology-Infused Classroom* requires certain paradigm shifts that will change your view of teaching and learning forever.

There is room for almost any method you may run across in the *Learner-Active, Technology-Infused Classroom*. As you read other books and articles, attend workshops and conferences, and complete coursework on various educational topics, consider how they align with this philosophy and how they can fit in. Unless you’re advocating for a totally lecture-based, teacher-centered classroom, most likely you’ll find that all of the popular strategies for fostering learning will fit nicely into the *Learner-Active, Technology-Infused Classroom*.

This is not a philosophy that is meant to stand alone; it is meant to be a solution to many of the challenges facing schools today. The *Learner-Active, Technology-Infused Classroom* is the perfect solution for designing Response to Intervention (RTI) classrooms. The RTI philosophy asks educators to begin with what is called “Tier I” instruction for all students, using formative assessment to gauge student progress. If some students begin to fall behind in content mastery, educators are asked to apply “Tier II” instructional methods to get them caught up and back to Tier I instruction. If students receiving Tier II instruction are still failing to master content, educators are asked to provide them with “Tier III” instruction. The *Learner-Active, Technology-Infused*

Classroom provides the perfect venue for offering Tiers I, II, and III instruction—potentially all in the same classroom. If you are attempting to embrace an RTI approach to instruction, this book will help you design an effective classroom.

Schools are looking to build twenty-first-century skills in students. Again, the *Learner-Active, Technology-Infused Classroom* is the solution to this challenge. Schools are considering how to provide virtual learning experiences for students so that they may enroll in a course that they attend via computer. The principles of the *Learner-Active, Technology-Infused Classroom* apply in this venue, as well as in the more conventional physical classroom. Schools are challenged to design effective coteaching (or inclusion) classrooms to provide instruction for all students, including special needs students, in one inclusive learning environment. The *Learner-Active, Technology-Infused Classroom* is the solution to this challenge.

Ultimately, consider how the philosophy and related structures and strategies presented in this book address the needs of your students and of the world of education today. Apply the principles as you make decisions about instruction in the classroom.

What to Expect

Designing a *Learner-Active, Technology-Infused Classroom* requires adaptive change, and adaptive change takes time and mental energy. Embarking on this instructional design journey will take you through three distinct levels in the change process. The first is “dynamic disequilibrium.” This occurs when you are implementing new strategies and structures for the first time. One moment you are excited and celebratory, and in the next you find yourself disappointed and in despair. One day you’re thrilled that you found this book; the next day you’re ready to toss it in the trash. (But please, don’t.) This is a really important time to keep a journal (written or digital) to track your experiences, successes, and challenges. The act of writing allows you to reflect on events and learn from them. A year from now, the journal will be a wonderful documentation of an amazing journey in instructional design. One fourth-grade teacher kept a journal. In her second year, she complained that her students were just not as good at the *Learner-Active, Technology-Infused Classroom* as her last year’s class. Then one day she sat down and read her journal from the prior year. She realized that she spent much more time in the fall teaching them the structures. In fact, last year’s students weren’t all that good at this learning environment either, but she helped them understand it. This year, she just assumed she was going to have students who were starting the year as if they were last year’s students at the end of the year. Keeping a journal can provide you with important insights, particularly in your first year of designing a *Learner-Active, Technology-Infused Classroom*.

This first phase of the change process typically lasts a year or less. Once you begin to repeat the instructional design process with a new set of students, you move to the next phase.

Human beings, by nature, seek stability. The early stages of the change process are often unnerving, so a natural inclination is to find those structures or strategies that appear to work the best and adopt them as the definitive solution. This causes you to enter the second phase: “contrived equilibrium.” You’ll design a rubric, for example, to which students respond well; and you’ll decide that all rubrics should always be written in this exact, same way. This is a dangerous phase where often teachers are asked to provide turnkey training and walk others down the exact path they have taken to designing the *Learner-Active, Technology-Infused Classroom*. While you may enjoy the successful achievement of your goals, the journey is truly just beginning. This phase can last a year, a few years, or, in some cases, the length of your career. The key is to push on to the third phase through continual reflective practice.

The third, and destination, phase of the change process in designing *Learner-Active, Technology-Infused Classrooms* is that of “reflective practitioner.” Arriving at this phase means you are continually questioning the structures and strategies you employ and making adjustments along the way. Times change, society changes, students change; and masterful teachers adapt their classroom practices accordingly. Returning to the earlier example, you may find that different styles of rubrics work for different students under different circumstances. You may modify your rubrics based on the time of year, the type of problem students are solving, and so forth. Each time, you question whether or not this is the best possible implementation.

I met with a teacher to review her authentic learning unit (ALU) and offered several suggestions for improving it. She exclaimed, “You know, *you* wrote this with me three years ago.” I smiled and shouted, “I’ve evolved!” What was acceptable to me three years prior was no longer good enough. Reflective practitioners eagerly open their practice to their own critique and that of others.

Although you may think you can begin at phase three, the instructional design work that lies ahead takes time and is like learning any new skill. Let’s face it, if you take up diving, you don’t expect to enter the Olympics the following year. Only time will produce improved results. Use a journal or other means to continually reflect on strategies and structures you are trying and how they worked out. When something does not appear to work, avoid the temptation to revert to former methods. Probe more deeply to consider what structure or strategy you could change to make it work. If you reflect on the situation, you will push yourself to find the key to success.

I worked with an extremely talented first-grade teacher, schooled with innovative methods from the Bank Street College and Columbia University.

I visited her classroom one day while her students were working on math activities related to place value. She had a collection of activity boxes and regularly introduced new ones to the students during their morning meeting time. During math time, pairs of students would select a box and work on the activity. I noticed two girls opening a box and looking perplexed; neither of them could remember what to do with this particular activity. I pointed out two boys who had just completed the activity and suggested they ask them. The girls looked at the boys, then looked back at me and said, in unison, “nah” and proceeded to select another box. I thought this was very funny and shared the story with the teacher, who was, to my surprise, horrified. “I should have been there for them. I should have helped them through it.” I pointed out that with twelve pairs of students working on these math tasks, it would be impossible to be present to facilitate every student at the point of needing help. Regardless of your grade level, you no doubt have encountered similar situations. I used this opportunity to introduce the idea of students scheduling their own time. Some activities are what I refer to as “teacher intensive,” where students benefit from the oversight and probing questions from teachers. Engaging in a math activity through which students are just learning about place value would be “teacher intensive,” as would students conducting and analyzing results from experiments, following a recipe for the first time, and applying a mathematical formula for the first time. Other activities are “non-teacher intensive,” where students can work independent of the teacher with success. I asked her what types of activities her students would be engaged in during the day that did not require her to be overly attentive to them. She mentioned buddy reading and journal writing, where students typically engaged in these activities with little participation from her. I suggested that she tell the students that they had to spend a certain amount of time on each of these three activities (math boxes, buddy reading, and journal writing) but they could choose any order they wished.

At first, the teacher was skeptical her students could succeed at this, as she kept fairly tight control over the classroom activities. Over lunch, she pondered the idea and decided to try it. I walked into the classroom in the afternoon and there were her students with their schedules in which they ordered the activities, all going about their work. Sure enough, only a handful of students were working on their math boxes at any given time, allowing her to spend much more quality time with them ensuring they were building the right understanding of place value.

At one point, the teacher pointed out to me a student who seemed to be rather disoriented, walking around the room with no apparent purpose. Her response was, “See, this really doesn’t work for special education students. He’s supposed to be buddy reading now.” It would be easy for her to have dismissed the idea of students scheduling their own time. In reality, she just needed to add a structure. I talked about how primary students, at first, do

not know how to line up for, say, art class. So the teacher deliberately walks them through one step at a time: clear your desks, sit quietly, table one get on line, nice and straight, and so forth. By the next month, the teacher is usually simply saying, “line up for art class.” So together, we developed a checklist for buddy reading: find a book, find a buddy, find an open spot on the floor, sit down cross-legged facing one another, and so forth (Figure 1.1). The teacher introduced the checklist to the students who needed guidance. They learned the steps to follow the checklist, and it worked! So as you reflect upon your challenges, always consider you might just need to add another structure or strategy.

Figure 1.1. Buddy-Reading Checklist

- Get your reading book.
- Find your buddy.
- Find a quiet, empty spot to read.
- Sit down knee to knee.
- Open your books.
- Decide who will read first.
- Read one page while the buddy follows along.
- Switch roles.
- Read for at least 10 minutes.

Imagine, Consider, Create

As you work to design your *Learner-Active, Technology-Infused Classroom*, take time to *imagine* the possibilities, *consider* the research and experience of others, and then *create* your classroom. When you reach the *create* sections, I encourage you to stop and spend some time designing the materials being described. You’ll note that there will be some structures and strategies that you already use, some that you can easily envision adding to your repertoire, and some that you feel will absolutely not work in your classroom. Start by adding those that make the most sense to you; but never lose track of those seemingly impossible ideas. Keep them in your journal and return to them down the road.