

Learning, or Not Learning, in School

Learning—the goal of schooling—is a complex process. But what *is* learning? Consider the following definitions and the implications each has for teaching:

- Learning is the process of acquiring knowledge or skill through study, experience, or teaching.
- Learning is experience that brings about a relatively permanent change in behavior.
- Learning is a change in neural function as a consequence of experience.
- Learning is the cognitive process of acquiring skill or knowledge.
- Learning is an increase in the amount of response rules and concepts in the memory of an intelligent system.

Which definition fits with your beliefs? Now ask yourself, how is it that *you* learn? Think of something that you do well. Take a minute to analyze this skill or behavior. How did you develop your prowess? How did you move from novice to expert? You probably

did not develop a high level of skill from simply being told how to complete a task. Instead, you likely had models, feedback, peer support, and lots of practice. Over time, you developed your expertise. You may have extended that expertise further by sharing it with others. The model that explains this type of learning process is called *the gradual release of responsibility instructional framework*.

The Gradual Release of Responsibility Instructional Framework

The gradual release of responsibility instructional framework purposefully shifts the cognitive load from teacher-as-model, to joint responsibility of teacher and learner, to independent practice and application by the learner (Pearson & Gallagher, 1983). It stipulates that the teacher moves from assuming “all the responsibility for performing a task . . . to a situation in which the students assume all of the responsibility” (Duke & Pearson, 2002, p. 211). This gradual release may occur over a day, a week, a month, or a year. Graves and Fitzgerald (2003) note that “effective instruction often follows a progression in which teachers gradually do less of the work and students gradually assume increased responsibility for their learning. It is through this process of gradually assuming more and more responsibility for their learning that students become competent, independent learners” (p. 98).

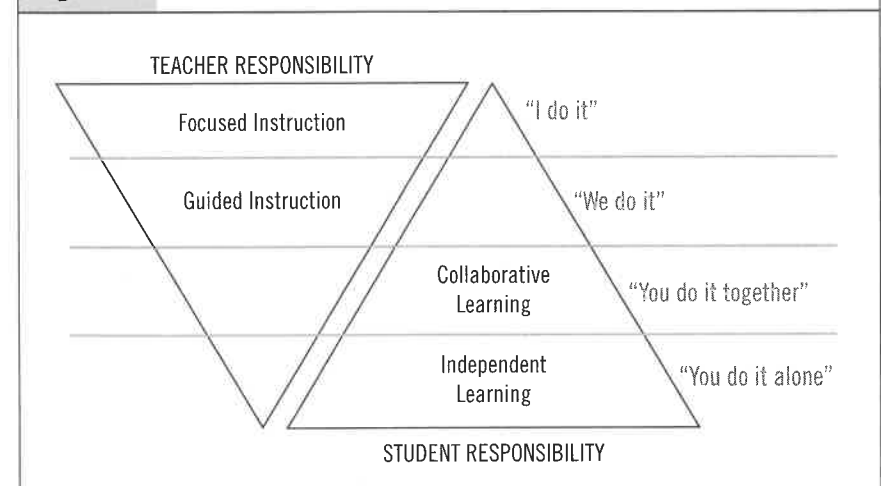
The gradual release of responsibility framework, originally developed for reading instruction, reflects the intersection of several theories, including

- Piaget’s (1952) work on cognitive structures and schemata
- Vygotsky’s (1962, 1978) work on zones of proximal development
- Bandura’s (1965) work on attention, retention, reproduction, and motivation
- Wood, Bruner, and Ross’s (1976) work on scaffolded instruction

Taken together, these theories suggest that learning occurs through interactions with others; when these interactions are intentional, specific learning occurs.

Unfortunately, most current efforts to implement the gradual release of responsibility framework limit these interactions to adult and child exchanges: *I do it; we do it together; you do it*. But this three-phase model omits a truly vital component: students learning through collaboration with their peers—the *you do it together* phase. Although the effectiveness of peer learning has been demonstrated with English language learners (Zhang & Dougherty Stahl, 2011), students with disabilities (Grenier, Dyson, & Yeaton, 2005), and learners identified as gifted (Patrick, Bangel, & Jeon, 2005), it has typically been examined as a singular practice, isolated from the overall instructional design of the lesson. A more complete implementation model for the gradual release of responsibility recognizes the recursive nature of learning and has teachers cycle purposefully through purpose setting and guided instruction, collaborative learning, and independent experiences. In Figure 1.1, we map out these phases of learning, indicating the share of responsibility that students and teachers have in each.

Figure 1.1 A Structure for Instruction That Works



We are not suggesting that every lesson must always start with focused instruction (goal setting and modeling) before progressing to guided instruction, then to collaborative learning, and finally to independent tasks (Grant, Lapp, Fisher, Johnson, & Frey, 2012). Teachers often reorder the phases—for example, begin a lesson with an independent task, such as bellwork or a quick-write, or engage students in collaborative peer inquiry prior to providing teacher modeling. As we stress throughout this book, what is important and necessary for deep learning is that students experience all four phases of learning when encountering new content. We will explore these phases in greater detail in subsequent chapters, but let's proceed now with an overview of each.

Focused Instruction

Focused instruction is an important part of the overall lesson design. This phase includes establishing a clear lesson purpose. We use the word *purpose* rather than *goal*, *objective*, or *learning target* because it's essential to ensure that students grasp the relevance of the lesson. The statement of a lesson's purpose can address goals related to content, language, and social aspects. Consider, for example, the teacher who clearly communicates the purpose of a lesson as follows:

Our content goal today is to multiply and estimate products of fractions and mixed numerals because these are used in cooking, construction, and medicine. Our language goal for today is to use precise mathematical terminology while discussing problems and answers with one another. Our social goal today is to improve our turn-taking skills by making sure that each member of the group has a chance to participate in the discussion.

As Dick, Carey, and Carey (2001) remind us, an “instructional goal is (1) a clear, general statement of learner outcomes,

(2) related to an identified problem and needs assessment, and (3) achievable through instruction” (p. 25). These are important considerations when establishing lesson purpose. As we will discuss further in Chapter 2, it's not enough to simply state the lesson purpose. We must ensure that students have opportunities to engage with the purpose in a meaningful way and obtain feedback about their performance.

In addition to establishing purpose, the focused instruction phase of learning provides students with information about the ways in which a skilled reader, writer, or thinker processes the information under discussion. Typically, this is done through direct explanations, modeling, or think-alouds in which the teacher demonstrates the kind of thinking required to solve a problem, understand a set of directions, or interact with a text. For example, after reading aloud a passage about spiders to 3rd graders, a teacher might say:

Now I have even more questions. I just read that spiders don't have mouth parts, so I'm wondering how they eat. I can't really visualize that, and I will definitely have to look for more information to answer that question. I didn't know that spiders are found all over the world—that was interesting to find out. To me, the most interesting spider mentioned in this text is the one that lives underwater in silken domes. Now, that is something I need to know more about.

Focused instruction is typically done with the whole class and usually lasts 15 minutes or less—long enough to clearly establish purpose and ensure that students have a model from which to work. Note that focused instruction does not have to come at the beginning of the lesson, nor is there any reason to limit focused instruction to once per lesson. The gradual release of responsibility instructional framework is recursive, and a teacher might reassume responsibility several times during a

lesson to reestablish its purpose and provide additional examples of expert thinking.

Guided Instruction

The guided instruction phase of a lesson is almost always conducted with small, purposeful groups that have been composed based on formative assessment data. There are a number of instructional routines that can be used during guided instruction, and we will explore these further in Chapter 3. The key to effective guided instruction is planning. These are not random groups of students meeting with the teacher; the groups consist of students who share a common instructional need that the teacher can address.

Guided instruction is an ideal time to differentiate. As Tomlinson and Imbeau (2010) have noted, teachers can differentiate content, process, and product. Small-group instruction allows teachers to vary the instructional materials they use, the level of prompting or questioning they employ, and the products they expect. For example, Marcus Moore,* a 7th grade science teacher, identified a group of five students who did not perform well on a subset of pre-assessment questions related to asteroid impacts. He met with this group of students and shared with them a short book from the school library called *Comets, Asteroids, and Meteorites* (Gallant, 2000). He asked each student to read specific pages related to asteroids and then to participate in a discussion with him and the others in the group about the potential effect that these bodies might have on Earth. During this 20-minute lesson, Mr. Moore validated and extended his students' understanding that, throughout history, life on Earth has been disrupted by major catastrophic events, including asteroids. At one point in the group's discussion, he provided this prompt:

*All the teachers and students we discuss in this book are real people, with names changed to protect their privacy.

Consider what you know about the Earth's surface. Talk about that—is it all flat? (*Students all respond no.*) What do you think are the things that made the surface of the Earth look like it does? Remember, the Earth has a history. . . .

A single guided instructional event won't translate into all students developing the content knowledge or skills they are lacking, but a series of guided instructional events will. Over time and with cues, prompts, and questions, teachers can guide students to increasingly complex thinking. Guided instruction is, in part, about establishing high expectations and providing the support so that students can reach those expectations.

Collaborative Learning

As we have noted, the collaborative learning phase of instruction is too often neglected. If used at all, it tends to be a special event rather than an established instructional routine. When done right, collaborative learning is a way for students to consolidate their thinking and understanding. Negotiating with peers, discussing ideas and information, and engaging in inquiry with others gives students the opportunity to use what they have learned during focused and guided instruction.

Collaborative learning is not the time to introduce new information to students. This phase of instruction is a time for students to apply what they already know in novel situations or engage in a spiral review of previous knowledge.

It is important, too, that you allow collaborative learning to be a little experimental, a little messy. In order for students to consolidate their thinking and interact meaningfully with the content and one another, they need to encounter tasks that will reveal their partial understandings and misconceptions as well as confirm what they already know. In other words, wrestling with a problem is a necessary condition of collaborative learning. If you are pretty

certain your students will be able to complete a collaborative learning task accurately the first time through, that task would probably be better suited to the independent learning phase.

Collaborative learning is also a perfect opportunity for students to engage in accountable talk and argumentation. *Accountable talk* is a framework for teaching students about discourse in order to enrich these interactions. First developed by Lauren Resnick (2000) and a team of researchers at the Institute for Learning at the University of Pittsburgh, accountable talk describes the agreements students and their teacher commit to as they engage in partner conversations. These include staying on topic, using information that is accurate and appropriate for the topic, and thinking deeply about what the partner has to say. Students are taught to be accountable for the content and to one another, and they learn techniques for keeping the conversation moving forward, toward a richer understanding of the topic at hand. The Institute for Learning (n.d.) describes five indicators of accountable talk:

1. Press for clarification and explanation (e.g., “Could you describe what you mean?”).
2. Require justification of proposals and challenges (e.g., “Where did you find that information?”).
3. Recognize and challenge misconception (e.g., “I don’t agree, because _____.”).
4. Demand evidence for claims and arguments (e.g., “Can you give me an example?”).
5. Interpret and use one another’s statements (e.g., “I think David’s saying _____, in which case, maybe we should _____.”).

These are important skills for students to master and, on a larger scale, valuable tools for all citizens in a participatory democracy (Michaels, O’Connor, & Resnick, 2008). They are also

key to meeting Common Core State Standards in speaking and listening, the first of which asks students to “prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others’ ideas and expressing their own clearly and persuasively” (National Governors Association Center for Best Practices, Council of Chief State School Officers [NGA/CCSSO], 2010a, p. 22).

We have seen teachers integrate collaborative learning opportunities into their instruction in a variety of ways. For example, a 10th grade social studies teacher selected a number of readings that would allow his students to compare and contrast the Glorious Revolution of England, the American Revolution, and the French Revolution. The students did so through reciprocal teaching (Palinscar & Brown, 1984), an arrangement in which groups of students read a piece of text in common; discuss the text using predicting, questioning, summarizing, and clarifying; and take notes on their discussion. At the end of the discussion, each student in the class summarizes the reading individually—a step that ensures the individual accountability that is key to successful collaborative learning.

The way in which one of these groups of students talked about their reading demonstrates how peers can support one another in the consolidation of information:

Jamal: I still don’t get it. Those folks in England had a revolution because the king wanted the army to be Catholic, and he got his own friends in government. But I need help to clarify what they mean by the “Dispensing Power.” It sounds all Harry Potter.

Antone: I feel you. But dispensing power—that’s just the name for getting rid of rules you don’t want.

LaSheika: That king, James number 2, used a power he had to suspend laws and other rules. Adding that to the things you

said already, it made people very angry, and they started the revolution to get rid of him. It's just like the other revolutions we talked about.

Collaborative learning situations help students think through key ideas, are a natural opportunity for inquiry, and promote engagement with the content. As such, they are critical to the successful implementation of the gradual release of responsibility instructional framework.

Independent Learning

The ultimate goal of instruction is that students be able to independently apply information, ideas, content, skills, and strategies in unique situations. We want to create learners who are not dependent on others for information and ideas. As such, students need practice completing independent tasks and learning from those tasks. Overall and across time, the school and instructional events must be “organized to encourage and support a continued, increasingly mature and comprehensive acceptance of responsibilities for one’s own learning” (Kesten, 1987, p. 15). The effectiveness of independent learning, however, depends on students’ readiness to engage in it; too many students are asked to complete independent tasks without having received the focused or guided instruction they need.

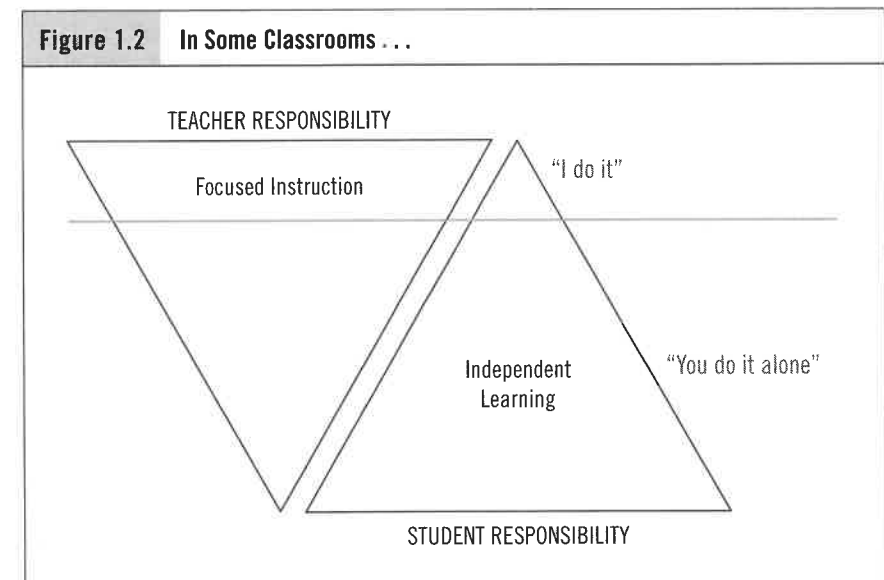
When students are ready to apply skills and knowledge to produce new products, there is a range of independent tasks that might be used. Our experience suggests that the more authentic a task is, the more likely the student is to complete it. For example, a kindergarten teacher might ask a student to read a familiar book to three adults, a 6th grade science teacher might ask a student to predict the outcome of a lab based on the previous three experiments, and a high school art teacher might ask a student to incorporate light and perspective into a new painting. What’s

essential is that an independent learning task clearly relate to the instruction each student has received and yet also provide the student an opportunity to apply the resulting knowledge in a new way.

When Learning Isn’t Occurring

With this structure for instruction that works fresh in mind, let’s look at some structures that don’t work so well. Unfortunately, there are still plenty of classrooms in which responsibility for learning is *not* being transferred from knowledgeable others (teachers, peers, parents) to students. Although they may feature some of the phases of instruction we have described, the omission of other phases derails learning in significant ways.

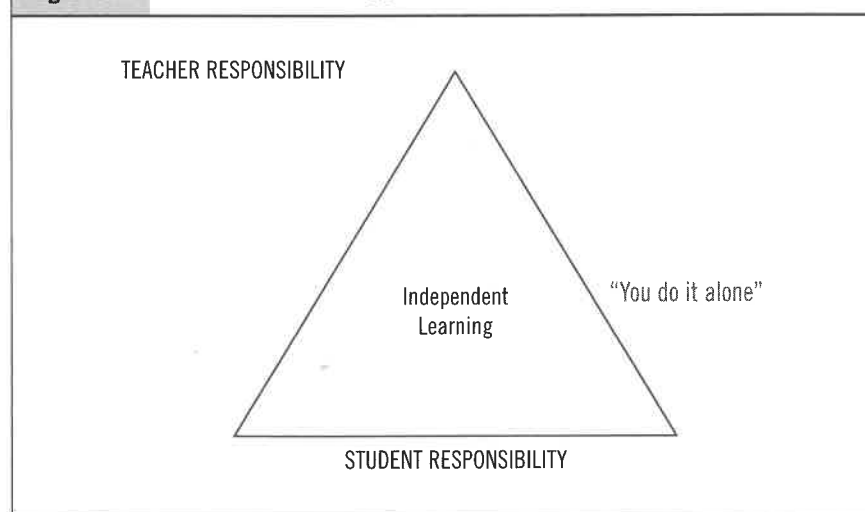
For example, in some classrooms, teachers provide modeling and then skip straight to asking students to complete independent tasks—an approach graphically represented in Figure 1.2.



This instructional model is very familiar. A teacher demonstrates how to solve algebra problems and then asks students to solve the odd-numbered problems in the back of the book. A teacher reads a text aloud and then asks students to complete a comprehension worksheet based on the reading. In both cases, the teacher fails to develop students' understanding of the content through the purposeful interaction of guided instruction.

Sadly, there is a classroom model even worse than this, at least in terms of instructional development. It's the one in which students are asked to learn everything on their own, depicted in Figure 1.3.

Figure 1.3 In Some Classrooms . . .



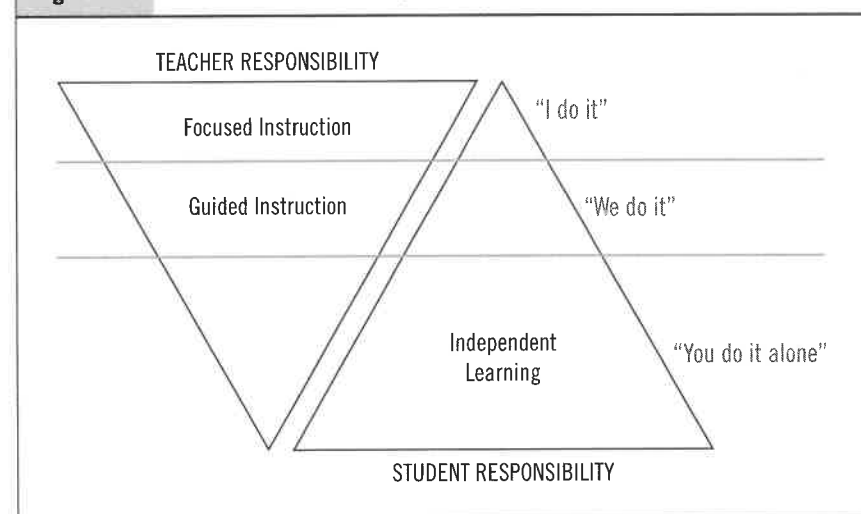
The structure of these classes is depressingly uniform. Students complete the prepared study packet of photocopied worksheets, or they read the assigned pages and then answer the questions at the back of the textbook—and they follow this pattern over and over again, day after day. There really isn't much teaching going on in these classrooms; it's mostly assigning or

causing work. Frankly, we'd be embarrassed to cash our paychecks if we "taught" like this.

There are days at school when students do need to spend significant amounts of time working independently—completing projects, writing essays, and the like. However, this should not be happening every day, and on the days it does happen, students need to be reminded of the purpose of the lesson, experience a brief episode of expert thinking, and interact with their peers.

Even in classrooms that most people would consider "good" or "good enough," the gradual release of responsibility instructional framework is seldom fully operationalized. As noted, the most frequent omission is the collaborative learning phase, leading to the instructional approach represented in Figure 1.4.

Figure 1.4 In Some Classrooms . . .



In these classrooms, the teacher provides modeling and then meets with small groups of students. But students don't have the opportunity to collaborate, as they are all required to complete independent tasks while waiting their turn to meet with the

teacher. For example, the teacher might model comprehension strategies useful in understanding scientific texts (*I do it*) and then meet with two or three small groups of students to guide their understanding (*We do it together*). As this is going on, the rest of the students are more likely to be assigned independent reading from a textbook (*You do it*) than they are to work in collaborative learning groups (*You do it together*).

We believe that all four phases of the gradual release of responsibility framework—focused instruction, guided instruction, collaborative learning, and independent learning—are necessary if we want students to learn deeply, think critically and creatively, and be able to mobilize learning strategies. But we didn't always understand this. Our teaching histories are replete with all of the ineffective models of instruction that we've just described.

When the Importance of Gradual Release Became Real for Us

The gradual release of responsibility instructional framework has been around for decades, and we have long used it with both the education students in our preservice classes and our public school students. But we can remember very specifically when we fully grasped its importance. The two of us were in Las Vegas at a conference. We were staying at the Venetian Hotel, a very nice place to stay. Doug had a cell phone on his hip, the old kind of cell phone that did one thing only—it made phone calls.

While we were walking through the lobby, Doug's phone rang. As he tried to answer it, it fell from his hip into the Venetian's lagoon, and down the drain it went. Given that Doug couldn't imagine a weekend without a cell phone (even one that couldn't do anything fancy), we took a taxi to the local Sprint store. Doug's plan was to exercise his insurance policy and get a free replacement phone.

The salesperson at the Sprint store saw the situation differently. Wanting to make a new sale, he directed Doug away from the "old school" phones and toward the new, high-tech models. "You need a phone that is more intuitive," he told Doug. "One that has e-mail, an address book, a calendar program, and that can search the Web." Doug assured him that no, he did not need any of these things. The sales guy—we'll call him Steve—was very persistent and noted that the newer phones also sent text messages. Doug had never sent a text message in his life, nor had the need ever arisen. But Steve was skilled. He said, "You know, the young people all send text messages. It's the new way of communicating." Doug wants to be a young person, so out came his credit card. Within minutes, he was the proud owner of a Treo 650. As Doug watched, Steve the salesperson demonstrated the phone's various fancy features. Doug felt pretty proud of his high-tech purchase.

About an hour later, back at the hotel, the new phone rang. There it sat, buzzing away, but Doug didn't know how to answer it. It didn't flip open like his old phone had, and there wasn't any obvious button labeled "Answer." Frustrated, we both got back in the taxi and returned to the Sprint store.

Of course, Doug couldn't bear to tell Steve the sales guy (who seemed to be about 12 years old) that he didn't know how to work the phone. He just held it up and said, "I think it's broken." Steve immediately took it out of Doug's hand and started working the phone.

Doug was suddenly struck by a wave of guilt. Turning to Nancy, he said, "How many times have I modeled comprehension for my students only to take back the task when they had difficulty?" What Steve the sales guy did, and what Doug recognized as something he was prone to doing himself, is a violation of the gradual release of responsibility instructional framework. When learners experience difficulty and confusion, they need guided instruction,

not more modeling. Frustrated learners already know that their teachers can complete the tasks; they've seen their teachers do so several times over. What a frustrated learner needs is direction and practice, with scaffolding in place to ensure success.

Back at the store, Doug turned to Steve and said, "I really don't need another model. I need some guided instruction. Can I hold the phone while you talk me through the operation?" Steve was a little puzzled, but he obliged. He guided, prompted, questioned, and cued Doug on how to use the phone. (Nancy got so caught up in the experience that she decided, on the spot, to buy a new Treo 650 as well.)

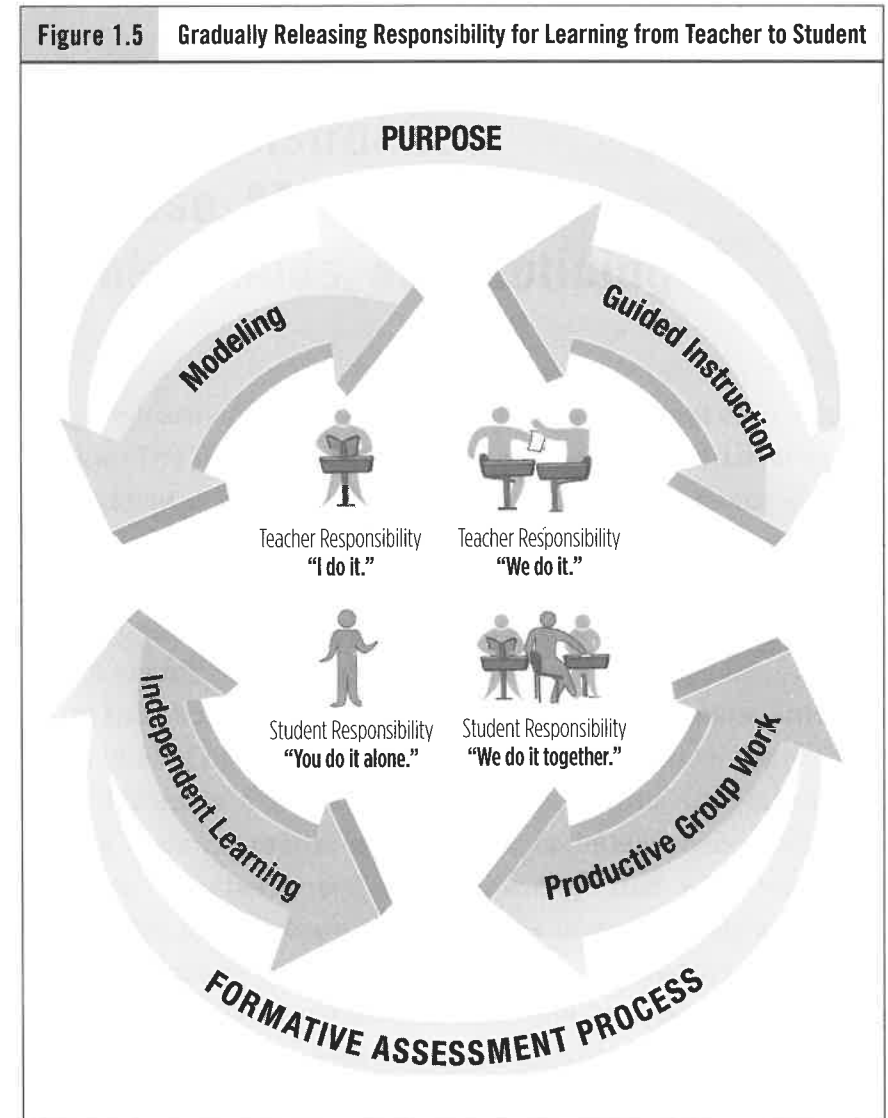
Of course the combination of focused instruction and one guided instructional event did not ensure that either of us could use our new technology independently. What we needed now was the opportunity to practice without the teacher (in this case, Steve) providing cues. As Doug said to Nancy, "I'm too embarrassed to ask him how to do it again. We'll have to figure it out." Well, figure it out we did, slowly and over time. That night at dinner at the Capitol Grill, we sat across the table from one another sending text messages. We collaborated, problem solving as we went.

Over several weeks, with much practice and peer support, we both incorporated this new technology into our lives. And the process helped us grasp, definitively, that everything we know how to do well, we learned through this process of modeling, guided practice, collaborative learning, and independent application. The gradual release of responsibility instructional framework became real to us then, and we've both used and advocated for it ever since.

Conclusion

Structured teaching requires that teachers know their students and content well, that they regularly assess students' understanding of the content, and that they purposefully plan interrelated

lessons that transfer responsibility from the teacher to the student. The theory that guides this type of teaching, the gradual release of responsibility, can also be conceptualized as shown in Figure 1.5, which highlights the framework's recursive structure



and the ways in which teachers might vary its four instructional phases to optimize learning.

In the remainder of this book, we examine each aspect of this instructional framework and note the variations that teachers can use to meet students' needs.