Learning, or Not Learning, in School

Learning—the goal of schooling—is a complex process. But what is learning? It's a bit more complex than most people think. Consider the following definitions of learning and the implications each has for teaching:

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

Which definition fits with your beliefs? 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?

We would argue that the things you do well were taught to you through a series of intentional actions. You probably did not develop high levels of skills from simply being told how to complete tasks. Instead, you likely had models, feedback, peer support, and lots of practice. Over time, you developed your expertise. You may even have learned more when you had to share that expertise with others. The model that explains this type of learning environment is called the *gradual release of responsibility*.

Gradual Release of Responsibility

The gradual release of responsibility model of instruction suggests that the cognitive load should shift slowly and purposefully from teacher-as-model, to joint responsibility, to independent practice and application by the learner (Pearson & Gallagher, 1983). The gradual release of responsibility model 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 "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 model is the intersection of several theories, including the following:

- Piaget's (1952) work on cognitive structures and schema
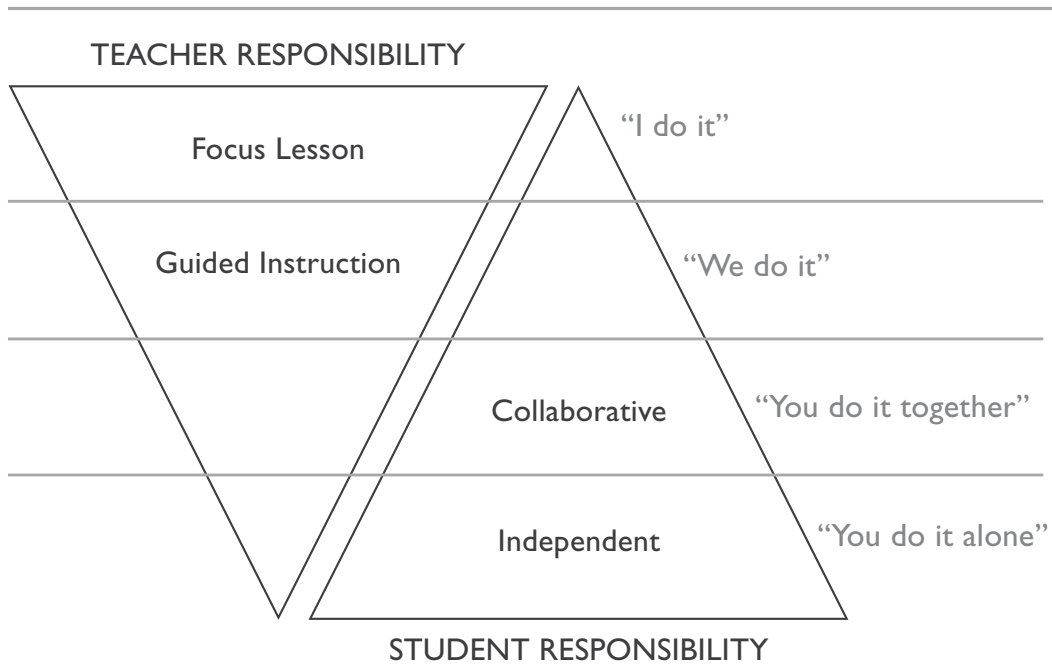- Vygotsky's (1962, 1978) work on zones of proximal development

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• 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, and when these interactions are intentional, specific learning occurs. Unfortunately, most current implementation efforts of the gradual release of responsibility model limit these interactions to adult and child exchanges. A common framework for implementing the model is *I do it; we do it; you do it*. In other words, many current models lack a vital component: learning through collaboration with peers.

The effectiveness of peer learning has been demonstrated with English language learners (Gersten & Baker, 2000), students with disabilities (Stevens & Slavin, 1995), and learners identified as gifted (Coleman & Gallagher, 1995). While the effectiveness of peer learning has been documented, 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 moves from modeled to guided instruction, followed by collaborative learning, and finally independent experiences (see Figure 1.1).

The four instructional arrangements contained within Figure 1.1 include focus lessons, guided instruction, collaborative learning, and independent tasks. Each of these will be explored in greater detail in subsequent chapters. At this point, we will provide an overview of each of these such that we can then discuss situations in which students aren't learning.

Figure 1.1
A structure for successful instruction

TEACHER RESPONSIBILITY

Focus Lesson — "I do it"

Guided Instruction — "We do it"

Collaborative — "You do it together"

Independent — "You do it alone"

STUDENT RESPONSIBILITY

Focus Lessons

In the gradual release of responsibility model, the focus lesson is the modeling phase. For a focus lesson to be effective, teachers must clearly establish a purpose and model their own thinking. Consider, for example, the teacher who clearly communicates the purpose of the lesson as follows:

> Our content goal today is to multiply and estimate products of fractions and mixed numerals. Our language goal for today is to use mathematical terminology while discussing problems and answers with your peers. 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, p. 25) 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." These are three important considerations for establishing purpose. As we will discuss further in the chapter on focus lessons, it's not enough to simply state the purpose. We must ensure that students have opportunities to engage with the purpose and obtain feedback about their performance.

In addition to establishing purpose, the focus lesson should provide students with information about the ways in which a skilled reader, writer, or thinker processes information. Most often, this is done through a think-aloud (see Kucan & Beck, 1997) in which the teacher models the type of thinking required to solve problems, understand directions, comprehend a text, or the like. For example, after reading aloud a passage about spiders to 3rd graders, a teacher might say:

> Now I have even more questions. I wonder how spiders eat if they don't have mouth parts. I can't really visualize that, so I think I'll look for more information to answer my question. I do remember something very interesting. I didn't know that spiders are found all over the world. I think that the most interesting spider is the one that lives underwater in silken domes. Now that is something I need to know more about.

Focus lessons are almost always done with the whole class and typically last 15 minutes or less. The point is to clearly establish purpose and to ensure that students have a model from which to work.

Guided Instruction

Another phase of instruction occurs as teachers meet with needs-based groups. Guided instruction is almost always done with small, purposeful groups, which are composed based on students' performance on formative assessments. A number of instructional strategies can be used during guided instruction that will be explored further in a subsequent chapter. The key to guided instruction lies in the planning. These are not random groups of students meeting with the teacher. Instead, 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 (2001) has 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, a 7th grade science teacher identified a group of five students who did not perform well on the pre-assessment questions related to the impacts of asteroids. 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 students to each read specific pages related to asteroids and then to have a discussion with him about the potential impact that these bodies might have on Earth. During this 20-minute lesson, the teacher validated and extended his students' understanding that the history of life on Earth has been disrupted by major catastrophic events, including asteroids. At one point in their discussion, the teacher asked the group of students:

> 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? The Earth has a history.

Of course, a single guided instructional event is not going to ensure that students suddenly develop the content knowledge or skills they were lacking. However, a series of guided instructional events will do so. 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 for students to reach those expectations.

Collaborative Learning

As we have noted, this phase of instruction is almost always neglected. If used, collaborative learning is often a special event and not an established instructional routine. The key to collaborative learning is the requirement for independent products from this group collaboration. This approach differs from many group-learning situations in which one product is produced. In those situations, teachers are often concerned that one student did all of the work while the others talked.

When collaborative learning is done right, our experience suggests that it is during this phase of instruction that students consolidate their thinking and understanding. Negotiating with peers, discussing ideas and information, or engaging in inquiry with others causes students to use what they learned during focus lessons and guided instruction. Importantly, collaborative learning is not the time to introduce new information to students. Rather, collaborative learning should be a time for students to apply information in novel situations or to engage in a spiral review of previous knowledge.

While meeting with small groups of students to facilitate their understanding of the historical importance of revolutions, a 10th grade social studies teacher has selected a number of readings that will allow students to compare and contrast the Glorious Revolution of England, the American Revolution, and the French Revolution. These students do so through reciprocal teaching (Oczkus, 2003; Palincsar & Brown, 1984) in which groups of four students read a piece of text in common and then discuss the text using predicting, questioning, summarizing, and clarifying. During the reciprocal teaching discussion, students take notes. At the end of the discussion, each student in this class is asked to summarize the reading individually. This individual accountability is key to the success of collaborative learning.

Listening in on one of the groups of students as they talk about their reading reveals the ways in which 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 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 made people very angry, and they started the revolution to get rid of him. It's just like the other revolutions we talked about.

These collaborative learning situations help students think through key ideas, are a natural opportunity for inquiry, and

ensure that students engage in content learning. As such, they are critical to the successful implementation of the gradual release of responsibility model of instruction.

Independent Tasks

The ultimate goal of our instruction is that students can independently apply information, ideas, content, skills, and strategies in unique situations. Our goal is not to create learners who are dependent on another person for information and ideas. As such, students need practice in completing independent tasks. To facilitate independent learning, 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). Unfortunately, too many students are asked to complete independent tasks in the absence of good instruction that ensures that they have the background knowledge to do so. While there are a range of independent tasks that ensure students can apply information, our experience suggests that the more authentic the task is, the more likely the student is to complete it.

As with collaborative learning, students should not be asked to do unfamiliar tasks—tasks for which they have not had instruction—independently. Independent tasks should require individual application of information previously taught. These tasks should provide students with opportunities to use their knowledge to produce new products. 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 write a prediction of 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. These tasks are clearly related to the instruction each student received, yet each

provides students an opportunity to apply that knowledge in a new way.

When Learning Isn't Occurring

Unfortunately, there are still classrooms in which responsibility is not being transferred from knowledgeable others (teachers, peers, parents) to students. These classrooms do not operate on an apprenticeship model in which scaffolding is used to ensure success. For example, in some classrooms, teachers provide modeling and then ask students to complete independent tasks. This approach is graphically represented in Figure 1.2.

Figure 1.2
In some classrooms . . .

TEACHER RESPONSIBILITY

Focus Lesson

"I do it"

Independent

"You do it alone"

STUDENT RESPONSIBILITY
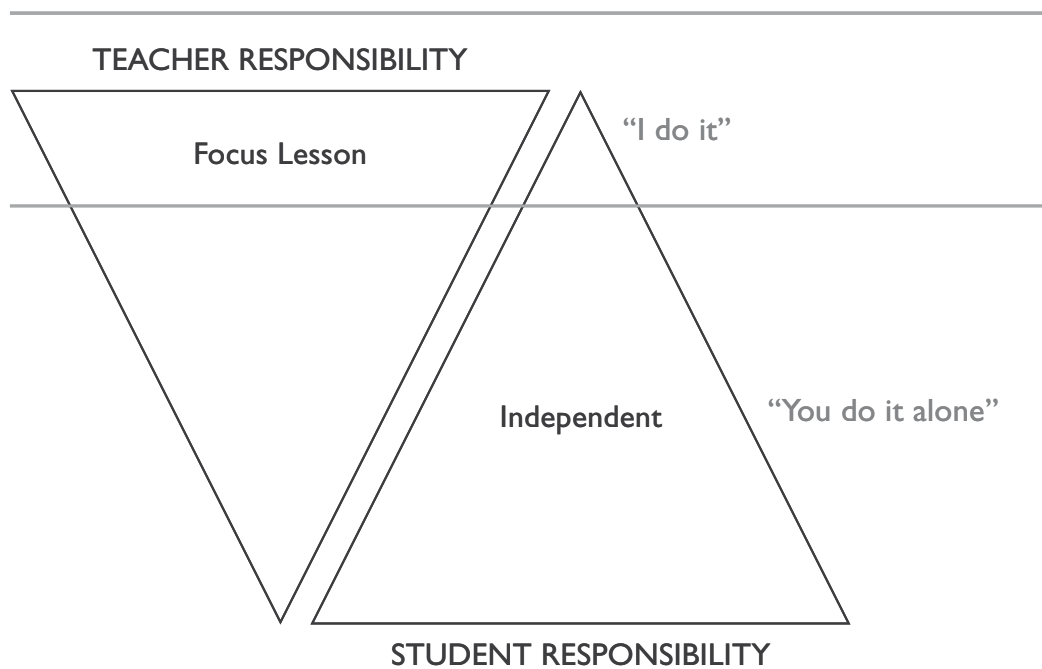
This instructional model is all too familiar. The teacher demonstrates how to solve algebra problems and then asks students to solve the odd-numbered problems in the back of the book. Or

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a teacher reads a text aloud and then asks students to complete a comprehension worksheet based on the reading. In both of these cases, the teacher fails to develop students' understanding of the content through purposeful interactions.

Sadly, there is a classroom model worse than this, at least in terms of instructional development. In some classrooms, students are asked to learn independently day after day. This approach is graphically represented in Figure 1.3.

Figure 1.3
In some classrooms . . .

TEACHER RESPONSIBILITY

Independent   "You do it alone"

STUDENT RESPONSIBILITY
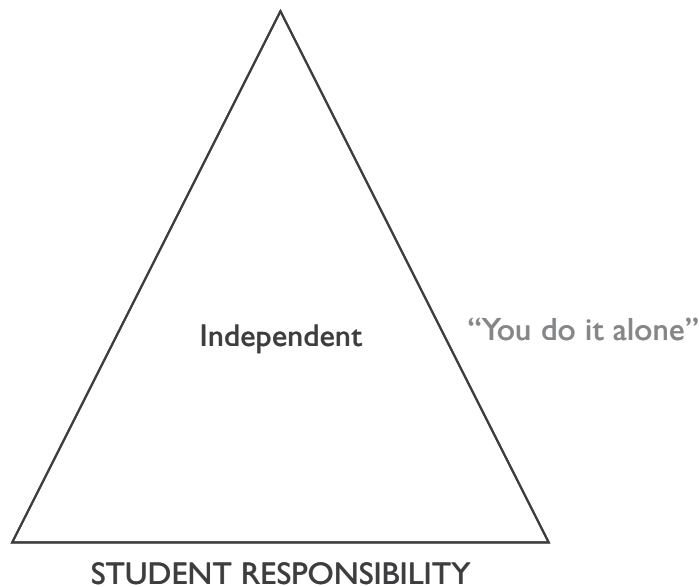
Some teachers assign pages from a textbook to be read and then require students to answer questions at the back of the book, over and over again. Other teachers spend hours at the photocopy machine creating packets for students to work on independently, hour after hour. There really isn't much teaching going on in these classrooms. It's mostly assigning or causing work.

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Frankly, we'd be embarrassed to cash our paychecks if we taught like this. However, we want to be careful in the discussion about independent work. There are days at school where students need to spend significant amounts of time completing projects, writing essays, and the like. However, this type of work does not occur every day, and it is based on the instruction that occurs in focus lessons, guided instruction, and collaborative learning.

But even in classrooms that most people would consider "good" or "good enough," the gradual release of responsibility model is not fully operationalized. Commonly, the collaborative learning phase is missing. This approach is graphically represented in Figure 1.4.

Figure 1.4
And in some classrooms . . .

TEACHER RESPONSIBILITY

Focus Lesson "I do it"

Guided Instruction "We do it"

Independent "You do it alone"

STUDENT RESPONSIBILITY
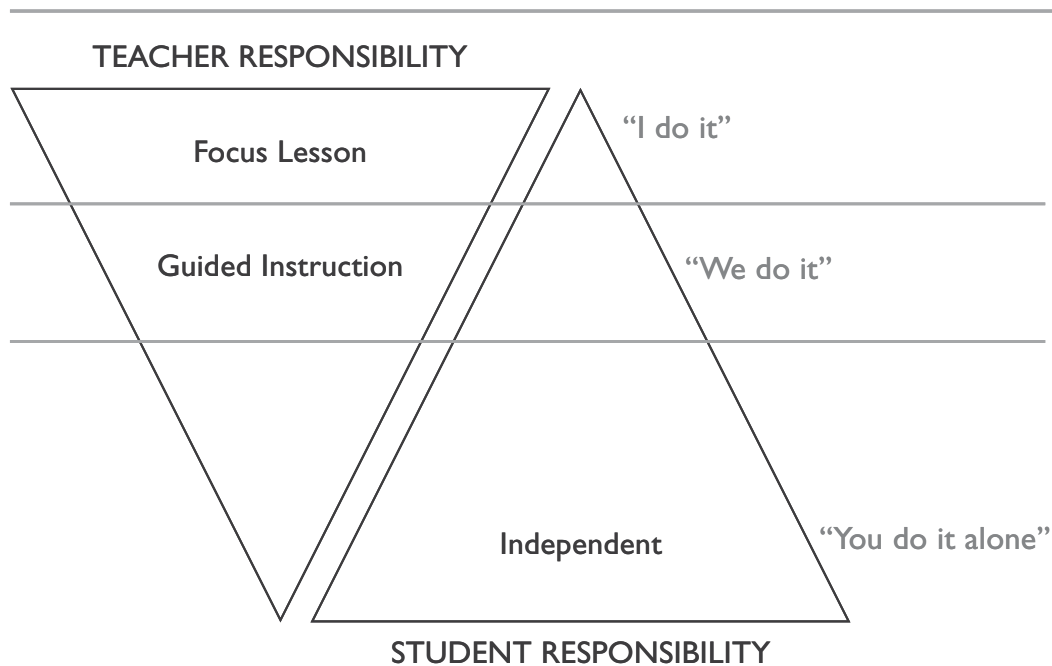
In these classrooms, the teacher models and then meets with small groups of students. Unfortunately, students don't have an opportunity to collaborate, as they are all required to complete

independent tasks while waiting their turn to meet with the teacher. For example, the teacher might model comprehension strategies useful in understanding scientific texts and then meet with two or three small groups of students to guide their understanding. While this happens, the rest of the students need to be in collaborative-learning groups. Unfortunately, they are more likely to be assigned independent reading from a textbook instead.

We believe that all four components are necessary for students to learn. Neglecting one or more of the stages in this progression will not result in deep learning, critical or creative thinking, or the ability to mobilize strategies as needed. Instead, we will have reinforced students who attempt to memorize facts for tests and not students who become independent, lifelong learners. But we didn't always understand this need to include all four components. Our teaching histories are replete with all of the examples described earlier.

When the Importance of Gradual Release Became Real for Us

The gradual release of responsibility model has been around for decades. We have used it in our preservice classes as well as in our teaching of public school students. But the day we fully understood the importance of this model was January 16. We were in Las Vegas, Nevada, 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. It did not take pictures, send e-mail, or do anything else fancy.

While Doug was walking through the lobby, his phone rang. As he tried to answer it, it fell from his hip into the lagoon. Down the drain it went. Given that Doug couldn't imagine a weekend

without a cell phone, we took a taxi to the local Sprint store to obtain a new phone. Doug wanted to exercise his insurance policy and get a free replacement phone.

The salesman saw it differently. He wanted to make a new sale, so he redirected Doug from the "old school" phones to ones that were high-tech. As the salesman said, "You need a phone that is more intuitive, one that has e-mail, an address book, a calendar program, and can search the Web." Doug assured him that no, he did not need any of these things. The salesman was very persistent and noted that the newer phones sent text messages. Doug had never sent a text message in his life, nor had the need ever arisen. But the salesman 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, and he bought the new Treo 650. Doug was very proud of his new, high-tech purchase. The salesman took the phone out of the box and demonstrated all kinds of features.

About an hour later, back at the hotel, the phone rang. There it sat, buzzing away, but Doug did not know how to answer it. There wasn't anything to flip open, like the old phone, and there wasn't any obvious button that said "answer." Frustrated, we got back in the taxi and returned to the Sprint store.

Of course, Doug couldn't bear to tell the salesman that he couldn't work the phone. Instead, Doug handed the phone to him and said, "I think it's broken." The salesman—we'll call him Steve—immediately took the phone out of Doug's hands and started working the phone. Standing in the store, Doug suddenly felt very guilty and turned to Nancy and said, "How many times have I modeled comprehension for students only to take away the task and do it for them when they had difficulty?" Clearly this approach is a violation of the gradual release of responsibility model. What learners need when they experience difficulty is

guided instruction, not more modeling. Frustrated learners already know that their teacher can complete the task; the teacher has demonstrated it several times. What the frustrated learner needs is guided practice, with the scaffolding there to ensure success.

Anyway, back to the store. Doug turned to Steve and said, "I really don't need another focus lesson; I need some guided instruction. Can I hold the phone while you talk me through the operation?" Steve was a little puzzled, but he complied. 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 the focus lesson and one guided instructional event did not ensure that we could use our new technology independently. What we needed was the opportunity to practice, without the teacher (or, in this case, the salesman) 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, slowly and over time, we did. That night, at dinner at the Capitol Grill, we sat across the table from each other 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. In thinking about this experience, we realized that everything we each know how to do well, we learned through this process of modeling, guided practice, collaborative learning, and independent application. We also realized that the things we don't do well were simply told to us, without the opportunity to engage with scaffolds and supports for learning. On that day, the importance of the gradual release of responsibility model of instruction became real.

Conclusion

We have presented the gradual release of responsibility as an instructional model that ensures better student learning through structured teaching. This instructional model is intentional, purposeful, and explicit. However, we want to distinguish this approach from highly prescriptive teaching. Gradual Release of Responsibility is not a script that teachers follow. Instead, this model helps teachers increase precision in their teaching. As Fullan, Hill, and Crévola (2006) note, we don't need more prescriptive teaching, but rather more precision in our teaching. Precision teaching requires that teachers know their students and content well, that they regularly assess students' understanding of the content, and that they purposefully plan lessons that transfer responsibility from the teacher to the student. It is through this very purposeful classroom structure that learning occurs.