2 INSTRUCTION

Developing Students to Own How They Are Learning

Ask for a definition of the phrase *good teaching*, and you will most likely be answered with an instructional strategy. Good teaching is group work. Good teaching is an entertaining and engaging lecture. Good teaching is direct instruction. Good teaching is inquiry method or complex instruction or scaffolding or differentiated instruction. Most people associate teaching with some form of methodology. Thus, most teachers think about their lessons through the lens of instruction.

But this approach to instruction focuses on the teacher—what they need to do to teach the skills. We want to flip this focus onto the students—what *they* need to do to learn the skills. True student ownership begins when the teacher looks at instruction from the students' point of view.

Instruction is defined as those strategies students will use to master the content and skills determined in curriculum. That is, once the student understands what they are learning, how they will show mastery, and why they are learning it, they must then determine the best way to learn. This is done with the support of the teacher. Madeline Hunter (1982) explains that "teaching is now defined as a constant stream of professional decisions made before, during, and after interactions with students; decisions which, when implemented, increase the probability of learning" (p. 3). The decisions that best support student learning also best support student ownership.

The Imperatives for Ownership of Instruction

To develop student ownership, several things are imperative: It is imperative for students to know and be able to articulate how they will learn the skills they are mastering in the day's lesson, in the unit, and in the course. It is imperative for students to understand how the instructional strategies they are using effectively support them to master these skills. It is imperative that they know and are able to articulate which strategies support their learning and how to apply them during the current class, in other classes, and when they are working on their own. It is imperative that they understand the value of pushing their learning by listening, speaking, reading, and writing with colleagues. It is imperative that they understand their role in their own learning—that they are the masters of their own mastery.

Table 2.1 provides some helpful indicators that reveal when students are taking ownership of their learning.

How Do Students Demonstrate Ownership of Instruction?

Each and every student is able to articulate:

- what they are learning and how they will demonstrate they have learned it,
- how they are learning,
- how engaging in conversations with their peers pushes their own learning,
- how they participate in these conversations,
- how their role as both a speaker and a listener supports their learning,
- how the instructional strategy they are using effectively supports them to master the learning,
- how they can utilize this strategy in future learning,
- the value of reflecting on how they learn,
- why the allotted time is provided,
- how best to utilize that time to support their learning,
- how routines can help them in the future, and
- why articulating these aspects of instruction helps them own their learning.

Table 2.1: Indicators of Student Ownership of Instruction

If students are able to articulate the points in table 2.1 effectively, they are engaging in the process of metacognition. Metacognition is a learner's ability to think about their own thinking, to know what they are knowing, and to learn about their own learning—in other words, metacognition is cognition about cognition. Allen Newell (1990) identifies two aspects of metacognition: (1) knowledge about cognition and (2) regulation of cognition. Thus, the strongest strategies we can engage in with our students are those that teach them about their learning and that can be applied to push their learning in other situations. This also leads to greater student ownership.

Putting Student Ownership into Practice

But what does student ownership look like in practice? What does it sound like when a student owns their part in instruction? What is the difference between a student who is simply *doing* or *understanding* instruction and one who is *owning* how they are learning?

A student is *doing* when they can state how they need to complete the task in front of them.

A student is *understanding* when they can explain what strategy they are engaged in.

A student is *owning* how they are learning when they can articulate the strategy they are currently using to learn, how this strategy supports their learning, and how they will use this strategy in the future—during this class, in other classes, and when they are working on their own.

The tables that follow—table 2.2, table 2.3, table 2.4, and table 2.5—present some examples of what this looks and sounds like on a continuum of doing-understanding-owning in a variety of content areas and grade levels, particularly when we ask the question, "How are you learning this?"

Possible responses on the continuum from first grade students in math when asked,

"How are you learning?"

"I have to make a picture of each number."

"I am working with my elbow partner. We are making models of our addition problems. Then we write them using numbers."

"We learned that the numbers on both sides of the equal sign must be the same. You can't use an equal sign if this is not true. Today we have to tell each other if the problem is true or false. Then we make a model with blocks to show if it is true. If it is true, our model shows this. If it is false, we have to fix it."
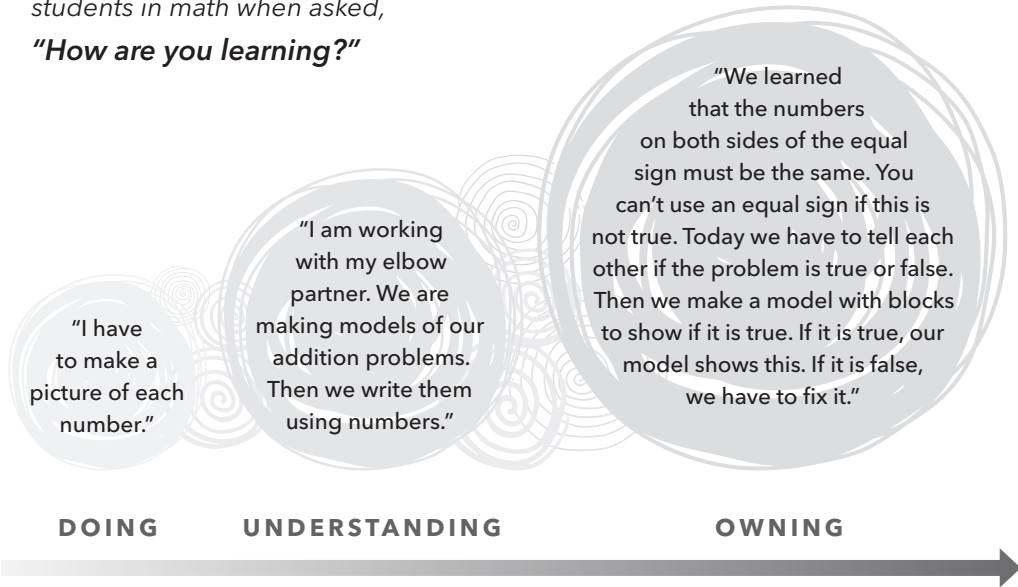
DOING   **UNDERSTANDING**   **OWNING**

Table 2.2: Student Ownership Continuum, Math, Grade 1

Possible responses on the continuum from fourth grade students in English-language arts when asked,

"How are you learning?"

"When asked, I have to tell who the narrator of the story is."

"We are using Cornell notes to determine the narrator of the story and then find words from the story that we can use as evidence."

"We are learning about point of view and the difference between first-person and third-person. We are using Cornell notes to gather how different authors use different ways to show who is narrating. Cornell notes help me keep track of the evidence from the text without having to write down every single word. I take notes this way in my other classes. It helps organize my thoughts."

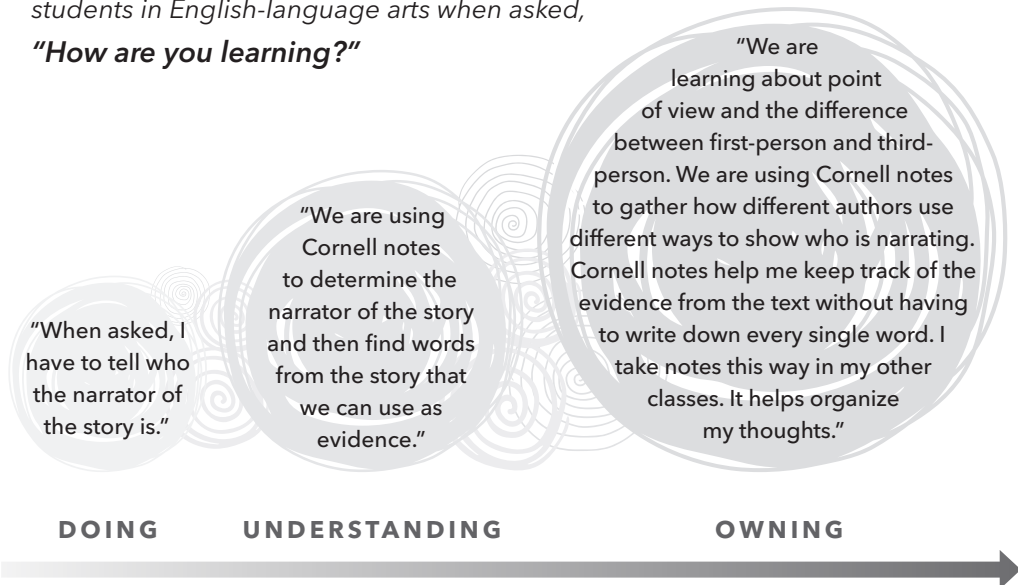**DOING**   **UNDERSTANDING**   **OWNING**

Table 2.3: Student Ownership Continuum, English-Language Arts, Grade 4

*Possible responses on the continuum from eighth grade
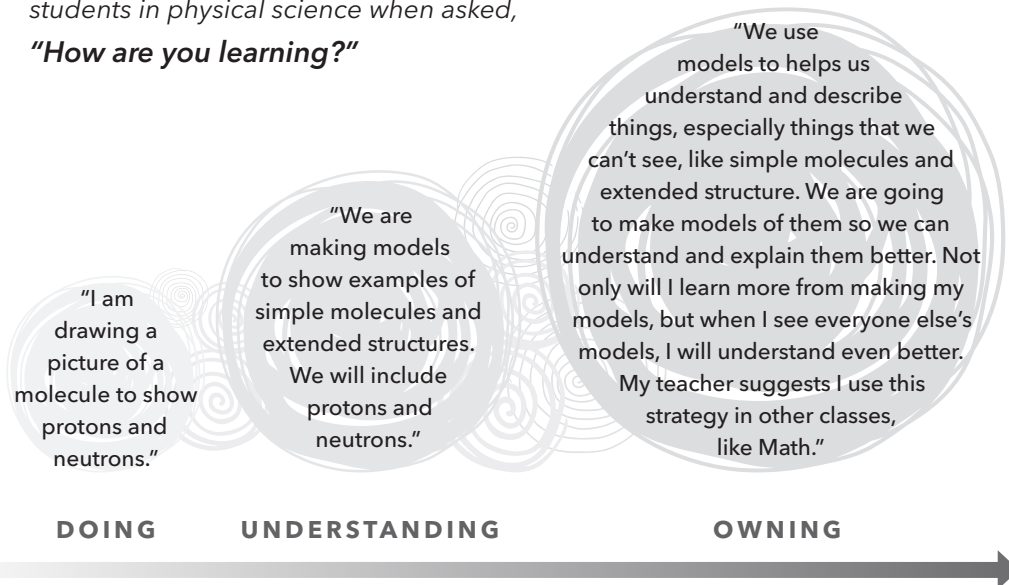students in physical science when asked,*

"How are you learning?"

"We use models to helps us understand and describe things, especially things that we can't see, like simple molecules and extended structure. We are going to make models of them so we can understand and explain them better. Not only will I learn more from making my models, but when I see everyone else's models, I will understand even better. My teacher suggests I use this strategy in other classes, like Math."

"We are making models to show examples of simple molecules and extended structures. We will include protons and neutrons."

"I am drawing a picture of a molecule to show protons and neutrons."

DOING   UNDERSTANDING   OWNING

Table 2.4: Student Ownership Continuum, Physical Science, Grade 8

*Possible responses on the continuum from high school
students in American history when asked,*

"How are you learning?"

"We are learning about points of view. Today we are reading about World War I and why each country entered it. We are gathering information on a point of view chart. In our groups, each of us represents the point of view of a different country. Before we can discuss their reason, we must understand it from their point of view. We come to consensus before we take notes on our chart. This means we must negotiate our answers."

"We are using a point of view chart to clarify why different countries entered World War I. I will listen to the teacher's lecture and take notes."

"I have to list three causes of World War I in my notebook."

DOING   UNDERSTANDING   OWNING

Table 2.5: Student Ownership Continuum, American History, High School

Moving to Student Ownership

What can a teacher do to move a student toward owning their learning? Student ownership is best defined as a mindset. Students who know they have the authority, capacity, and responsibility to own their learning possess an ownership mindset. Thus, to move students, the teacher must delegate the authority, build the capacity, and give the responsibility to each and every student.

How does a teacher do this? They must model the thinking behind the ownership and explicitly teach the skills of ownership. This takes planning. In order for students to answer the questions posed earlier—"How will I learn this?", "How will this strategy help me learn this?", and "How can I use this strategy in the future and in different situations?"—teachers must be strategic in the practices they use to increase learning.

While there are hundreds of actions a teacher must take in a day, we will focus on those three practices in instruction that research shows increase the opportunities for learning—by increasing the opportunities for student ownership.

Teachers must strategically decide when to offer the following three learning practices:

- **Strategic Learning Practice, Instruction 1:** Each and every student is supported by opportunities for meaningful engagement using structured student-to-student communication.

- **Strategic Learning Practice, Instruction 2:** Each and every student is supported by opportunities for meaningful engagement using effective instructional strategies.

- **Strategic Learning Practice, Instruction 3:** Each and every student is supported by opportunities for meaningful engagement in which instructional time is used efficiently.

In the following sections, we will clearly define each learning practice, describe what implementation looks and sounds like in the classroom, share teacher planning questions, offer examples of how students have been supported with these learning practices in a variety of content areas and grade levels, and explain how these practices directly lead to increased student ownership.

Strategic Learning Practice, Instruction 1

Each and Every Student Is Supported by Opportunities for Meaningful Engagement Using Structured Student-to-Student Communication

In order for students to own their learning in regard to instruction, each and every student must be able to answer the following questions:

▸ How does engaging in conversations with my peers push my learning?

▸ How do I participate in these conversations?

▸ What is my role as both a speaker and a listener?

In order for teachers to develop students who own their learning in regard to instruction, it is imperative that they support them with practices that are strategically implemented on a daily basis. This requires a focus on those practices that Duzinski (1987) and Rosenshine and Meister (1994) show increase the opportunities for learning by increasing the opportunities for student ownership. Strategic Learning Practice, Instruction 1, states: "Each and every student is supported by **opportunities** for **meaningful engagement** using **structured student-to-student communication**."

First, let's define each aspect of this practice.

Opportunities are those chances for students to be actively engaged. The greater the quantity and the higher the quality of these opportunities, the higher the probability of student learning.

Meaningful engagement happens in those times when students are involved in interactions that directly lead to increased understanding or mastery of the learning outcome.

Structured implies that these interactions have a purpose, a value, and a goal. These interactions can be planned by the teacher or the students, but everyone should be clear on their role in the interaction.

Student-to-student communication is an interaction between students in which each has an opportunity to push their thinking and understanding of the learning through speaking and listening.

The Practice in Action

What does this practice—"Each and every student is supported by **opportunities** for **meaningful engagement** using **structured student-to-student communication**"—look like in a classroom at the highest level? You might walk into Mrs. Rodriguez's second-grade class during science and read the following learning outcome on the flip chart: "We will make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object by accurately completing the Melting Objects lab report."

That is what the students read, but what happens when you ask them questions about their learning?

You: "What are you learning?"

Student: "I am learning about how objects can change. Today my group is experimenting with how objects can change from solids to liquids. We have to gather evidence to show our learning."

You: "I see you are working with and talking to other students during the experiment. How does this help you?"

Student: "First, it helps me because we get to help one another. We all have jobs in our group. I am in charge of recording our evidence today. We have to record what we see—we use the word *observe*. We will also weigh our objects before and after to see if the weight changed. We need to put that data in too. But before we write anything, we have to talk about it with our group to make sure it is all right. But it also helps us because we get to talk about and ask questions about what we are learning. Mrs. Rodriguez tells us we have to make our thinking out loud. We have to share ideas and listen to others. We all get smarter that way."

You: "How do you know what to talk about?"

Student: "We can talk about anything that will help us with the experiment, but we have to make sure we talk about the things the teacher puts on our sentence frames."

You: "What is a sentence frame?"

Student: "It gives us a question to ask, and the frame tells us how to answer it. We have to use the new words we have been learning in our answer. And

we have to answer in a complete sentence. It gives us practice with the new things we are learning about."

Are you wondering how the student was able to answer your questions so clearly and with such confidence? Let's ask Mrs. Rodriguez.

"I have been working a lot with my students to make sure they understand everything we are learning and how talking is critical to their education. The objective you see on the chart is just the beginning. It is the planning that has really supported them. I am very deliberate in making certain they know why engaging with peers will push their learning. I also have to continually model how to participate in a conversation and model their role as both a speaker and a listener."

Mrs. Rodriguez used the Strategic Learning Practice, Instruction 1, as a frame to help her plan how she wanted to offer this support. This frame is flexible and fits the needs of both teachers and students. However, the following planning questions in table 2.6 helped her focus the support.

Questions to Guide Implementing Strategic Learning Practice, Instruction 1:

Each and every student is supported by opportunities for meaningful engagement using structured student-to-student communication.

Use these planning questions to focus your support.

	Notes
❑ What skill will my students learn, and how will they demonstrate they have learned it?	
❑ How will I provide multiple, varied opportunities for student communication?	
❑ How do student communications build toward mastery of the learning outcome?	
❑ How do student communications provide high-quality reciprocal speaking and listening opportunities?	
❑ How will I share this information with my students?	
❑ How will I check that my students understand the goals of the conversation?	
❑ How will my students understand that reflecting on the instructional aspects of the learning supports ownership of their learning?	

Table 2.6: Questions to Guide Implementing Strategic Learning Practice, Instruction 1

Implementing the Practice

How did Mrs. Rodriguez use the questions in table 2.6 to help plan how she would offer support to her students? First, she had to determine the following:

▸ What skill will my students learn, and how will they demonstrate they have learned it?

Mrs. Rodriguez begins by explaining, "We are in a physical science unit on structure and properties of matter. The performance expectation for 2-PS1-3 is: 'Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object.' In first grade, the students began making science observations and constructing evidence. I wanted to build on these skills but with a focus on structures and properties of matter as they explored how a small set of pieces can be disassembled and made into a new object.

"I knew I had a lot to focus on with this lesson. I needed to deepen their understanding of the concept of changing matter, I needed to reinforce making observations to construct an evidence-based account, and I needed to support the continued development of academic language. I knew my students would need to work together and talk a lot if they were going to be successful."

With the first guiding question to implementing Strategic Learning Practice, Instruction 1, completed, Mrs. Rodriguez next had to determine the following:

▸ How will I provide multiple, varied opportunities for student communication?

▸ How do student communications build toward mastery of the learning outcome?

▸ How do student communications provide high-quality reciprocal speaking and listening opportunities?

Mrs. Rodriguez continues, "I had to decide when, why, and how my students would talk. Every lesson begins with an overview of the unit goal and the daily objective. This is a routine in my class. We review them, and students talk with their shoulder partner to make certain they understand what we are learning today and where our learning is going.

"For this lesson, I wanted to begin by reviewing what we have learned so far about the properties of matter. It is important that my students talk with lots of other students, not just their shoulder partner or their friends. I use an appointment clock in my classroom. This not only reinforces telling time but also lets my students get up and talk to other students. I had the students meet with their twelve o'clock appointment to review what we have learned so far. The students had to share out one item their partner shared with them. This requires them to be good listeners.

"When I got students into their experiment groups, I wanted to make sure they were talking every step of the way. But I also wanted to make certain their conversations were focused, pushed the skills we are learning about, and were in complete sentences. I used sentence frames for this. Each group has a set of questions and answer sentence frames that they must complete throughout the experiment.

"For example, in this experiment they need to answer the question: 'How did the object change?' They can answer this using the sentence frame: 'One way the object changed was _____. My evidence of this change is _____.'

"The next question asks: 'What is one way the object did not change?' The answer frames read: 'One way the object did not change was _____. My evidence to support this is _____.' These frames have helped my students have more focused, meaningful conversations that push their learning—while using academic language at the same time."

But Mrs. Rodriguez wanted to ensure that her students would be able to use the skills in a variety of situations. She wanted to help her students own this information so that she could increase the probability of their learning. Therefore, she then had to ask herself the following questions:

- How will I share this information with my students?
- How will I check that my students understand the goals of the conversation?

Mrs. Rodriguez says, "We have discussed the role of speaking and listening for learning from day one in our classroom. My students will tell you that they have to share ideas and listen to others. We will all get smarter that way. Throughout the lesson, we discuss what we have talked about. We specifically

discuss how the conversations helped us. This can mean it confirmed what we knew, it stretched our learning, or it made us think differently.

"In today's lesson, I reviewed the questions and sentence frames before the experiment. It was important to me that the students knew what they were going to talk about and why."

Mrs. Rodriguez was very interested in helping her second graders understand the value of owning their own learning. Thus, she had to determine the following:

> ▸ How will my students understand that reflecting on the instructional aspects of the learning supports ownership of their learning?

Mrs. Rodriguez observes, "Every day we talk about our learning. We share what conversations we had about our learning. We share how the conversations confirmed what we knew, stretched what we were learning, or made us think differently. When the students share, it is not just about the skill or concept. We reflect on how the talking and listening specifically helped us learn more. It's funny, I was out one day and had a substitute teacher. The students told me it was hard to learn that day because the classroom was so quiet. They understand the value of conversation for learning."

Teachers like Mrs. Rodriguez have realized that without this support—multiple opportunities to make meaning by sharing with other learners, speaking and listening about the learning, and building on one another's thoughts and ideas—her students would struggle with owning their learning.

What Teachers Are Doing

What are other ways teachers have implemented this practice—"Each and every student is supported by **opportunities** for **meaningful engagement** using **structured student-to-student communication**"—as they offer support for developing student ownership?

Take this example from a high school science teacher: "My students have really benefited from my learning more about structured communication. This used to be one of my weaknesses. I had always pictured the 'think, pair, share' as a silly activity until I saw a colleague effectively implementing it. I went back and tried it in my classroom and was surprised at how successful it

was. I love that it gets all students talking, even the ones I didn't think would be active participators. I also needed a way to get all my students to be more comfortable with sharing with the whole class. This is what I tried: My students sit at lab tables in groups of four. Each seat has a colored sticker, and when I have students talk, I draw a colored pom-pom out of a cup, and the person in the corresponding colored seat completes the task. Sometimes I have more than one person at the table reciprocally share—one person reads something aloud to the table, one person shares the answer to a question, and another person agrees or disagrees. I also tell students that I will use a random number generator to call on a student, but I give the table time to discuss before I select the person. There are so many great ways to get students talking, but I was never comfortable employing the strategy before. Now it is one of the most effective things I do. Whenever a class seems dead and isn't participating, I know I can count on using structured communication to facilitate discussion. This works in all levels of my classes, from regular to AP. My student teacher and I were just having a conversation on how drastically the energy and participation in a room can change when we start using colored pom-poms!"

Take this example from a junior high school health teacher: "My kids love to talk, but they wouldn't stay on task. I realized that it was because my questions weren't 'meaty' enough, and the students didn't need that much time to answer them. After attending a PD session on DOK levels, I began having the kids answer more thoughtful questions. They are much more interested in staying on task because the conversation is making them think."

Take this example from a fourth-grade teacher: "After I introduced the social studies vocabulary, I had students using the words every day with each other. During these conversations they had a chance to say the words and hear the words many times. When they took the quiz on Friday, everyone passed!"

Take this example from a second-grade math teacher: "I have my students turn and talk at every transition in the lesson. I have them remind one another of the learning intention and the success criteria. This helps them stay on track and gives me a chance to check for understanding."

Take this example from a high school principal: "My teachers have always asked good questions. They just never waited for the students to answer. They were impatient and would call on the one student who raised their hand and

move on. When they realized that students needed to talk, and they gave them the time, they saw that the students were more engaged. But it's been a struggle to get them to give students the time."

What Students Are Saying

What do students say about this practice—"Each and every student is supported by **opportunities** for **meaningful engagement** using **structured student-to-student communication**"—and its support for the ownership of their learning?

Take this example from a fifth grader: "Talking helps me understand my thinking. Sometimes I know what I am thinking, but when I try to explain it, it doesn't make any sense. Telling someone else helps me figure out my ideas. And listening helps me understand what other kids are thinking."

Take this example from a middle school student: "Sometimes when the teacher is talking, I don't understand. But when we get to talk to one another, that helps. Other students can explain it in a way that makes sense to me."

Take this example from a junior in high school: "My government teacher gives interesting lectures. Before he'd just talk the entire time, and I got most of it, I think. But lately he has given us time about every ten minutes to chat with each other to make sure we got the most important details of the lecture. This has helped me a lot. My notes are much more complete, and I feel that I understand the content better."

Strategic Learning Practice, Instruction 2

Each and Every Student Is Supported by Opportunities for Meaningful Engagement Using Effective Instructional Strategies

In order for students to own their learning in regard to instruction, each and every student must be able to answer the following questions:

▸ How does engaging in this instructional strategy support my learning?

▸ How can I use this instructional strategy in the future?

▸ What is the value of reflecting on my learning?

In order for teachers to develop students who own their learning in regard to instruction, it is imperative that teachers support students with practices that are strategically implemented on a daily basis. This requires a focus on those practices that Marzano (1998), Seidel and Shavelson (2007), Swanson and Hoskyn (1998), Fendick (1990), and Walker, Greenwood, Hart, and Carta (1994) show increase the opportunities for learning by increasing the opportunities for student ownership. Strategic Learning Practice, Instruction 2, states: "Each and every student is supported by **opportunities** for **meaningful engagement** using **effective instructional strategies**."

First, let's define each aspect of this practice.

Opportunities are those chances for students to be actively engaged. The greater the quantity and the higher the quality of these opportunities, the higher the probability of student learning.

Meaningful engagement happens in those times when students are participating in interactions that directly lead to increased understanding or mastery of the learning outcome.

Effective implies that the students demonstrate the intended learning at the end of the time allotted.

Instructional strategies are all of the approaches a teacher may employ to engage their students in learning that meets the determined objective and outcome of the unit or lesson. These instructional strategies take into account both the skill to be learned and the students learning the skill.

The Practice in Action

What does this practice—"Each and every student is supported by **opportunities** for **meaningful engagement** using **effective instructional strategies**"—look like in a classroom at the highest level? You might walk into Mr. Spicer's eighth-grade language arts class, and on the first page of the class agenda, found in the students' Chromebook, you will read: "Unit Standard: Analyze how a text—*Narrative of the Life of Frederick Douglass, an American Slave*, by Frederick Douglass—makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories). Unit Outcome: Write an explanatory and informative essay that compares the life of a slave to that of his master. Lesson Outcome: Analyze how chapters 5–7 make connections among and distinctions between Frederick Douglass and Mr. Auld in order to cite specific textual evidence with Cornell notes. You will read the text in your reciprocal teaching talk groups."

This agenda shows a well-planned unit by Mr. Spicer. But what happens when you ask students about their learning? How much do they own of the process? The students are sitting in groups as you walk around.

You: "What are you learning?"

Deb: "We're learning how to analyze a text on Frederick Douglass and how it compares and contrasts."

Zach: "The standard uses the phrase *makes connections among and distinctions between individuals*."

Deb: "Oh yeah. Mr. Spicer tells us to use as much academic language as we can. But we need to read the text and then find accurate evidence we can use in our essays."

You: "How will you read the text? Is that why you are sitting in groups?"

Zach: "Yes, we're in our reciprocal teaching talk groups, and we will read the text together, discuss it, make sure we have all understood it, and then take notes."

Deb: "We each have a role. Today I will be the questioner, Zach will be the clarifier, Jamal will be the summarizer, and Jane will be the predictor. As the questioner, I will read the paragraph out loud to the group. I will then ask them a couple of questions—one that is explicit and can be answered with

words from the text and another that is more inferential and can be answered by putting ideas together that might not be explicitly stated."

Zach: "Then I will clarify any vocabulary or phrases that the group is struggling with. We will also find the vocabulary Mr. Spicer told us we need to know about slavery and abolition. After I clarify, Jamal will summarize what we read, and we will add to it if we need to. Then Jane will make a prediction about what we will read about next. She will use words from what we just read or any text features—like titles and subheadings and captions—to make this prediction. We will agree or disagree and add our evidence."

Deb: "Before we move on to the next section, we will take notes using Cornell notes. We will check with one another that they are accurate and then read the next section."

You: "How does this help you learn?"

Jamal: "Reciprocal teaching helps me learn because it makes me read and reread the text. By having to answer the questions, clarify vocabulary and ideas, summarize, and then predict, I am understanding at a deeper level. If I read this by myself, I might think I know it all without realizing what I missed."

Jane: "I like these groups because it is fun to talk and find out what others are thinking. I also like the roles because this is what I need to be doing in my own head when I read by myself. The group lets me practice and see how others do it."

You: "How did you learn to do reciprocal teaching?"

Deb: "Mr. Spicer taught us about each skill individually at the beginning of the year. So, we spent a lot of time developing questions, clarifying vocabulary, summarizing, and using text clues to predict. We then got into groups and began practicing putting the skills together."

Zach: "Because it is toward the end of the year, Mr. Spicer is having us do as much of this work on our own as possible. We can ask him for help but only after we have all asked one another first. He says this is what will be expected of us in high school."

Are you wondering how Deb, Zach, Jamal, and Jane were able to answer your questions so articulately and with such confidence? Let's ask Mr. Spicer.

"First off, I had to make sure they understood what we were learning—in both the unit and the lesson. Then I had to determine the best way to have them learn this—there are so many strategies to choose from. Reciprocal teaching is an instructional strategy that we have been using all year, so the students are very familiar with it. We have used it in a lot of different contexts and with a lot of support from me, but this is the first time I have asked them to work in talk groups where they are in control of everything—the roles, the chunking of the text, time management. To do this I need to be very planned. I also need to be very deliberate about what we are learning and where we are headed—what we will complete at the end of the lesson and unit."

Mr. Spicer used the Strategic Learning Practice, Instruction 2, as a frame to help him plan how he wanted to offer this support. This frame is flexible and fits the needs of both teachers and students. However, the following planning questions in table 2.7 helped him focus the support.

Questions to Guide Implementing Strategic Learning Practice, Instruction 2:

Each and every student is supported by opportunities for meaningful engagement using effective instructional strategies.

Use these planning questions to focus your support.

	Notes
❑ What skill will my students learn, and how will they demonstrate they have learned it?	
❑ How will I select an instructional strategy that will build toward mastery of the learning outcome?	
❑ How will I select an instructional strategy that is appropriate for my students?	
❑ How does the instructional strategy require a high level of active participation?	
❑ How will I share this information with my students?	
❑ How will I check that my students understand the goals of the instruction?	
❑ How will my students understand that reflecting on the instructional aspects of the learning supports ownership of their learning?	

Table 2.7: Questions to Guide Implementing Strategic Learning Practice, Instruction 2

Implementing the Practice

How did Mr. Spicer use the questions in table 2.7 to help plan how he would offer support to his students? First, he had to ask himself the following question:

▸ What skill will my students learn, and how will they demonstrate they have learned it?

Mr. Spicer observes, "We are at the end of the year, and my students still need a lot of practice reading informational texts. In social studies, my students are learning about the Civil War, so the narrative by Frederick Douglass fits in nicely. I selected the standard 8.RI.3: 'Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).' This standard helped me determine the focus for the end-of-unit essay. After that, the curriculum side of planning this unit came fairly quickly."

Mr. Spicer then had to determine the answers to the following questions:

▸ How will I select an instructional strategy that will build toward mastery of the learning outcome?

▸ How will I select an instructional strategy that is appropriate for my students?

▸ How does the instructional strategy require a high level of active participation?

Mr. Spicer says, "I realized that the unit and the final essay hinged on the students' ability to comprehend a fairly complex text. Frederick Douglass wrote this narrative in 1845 using his particular vernacular. I knew there would be vocabulary and ideas that were new to my students. I also knew that they needed to grapple with the text and its concepts if they were to pull relevant evidence from it to use in their essays. And, as it was the end of the year, they needed to practice working independently to get ready for high school.

"That's why my first decision was how they were to access the text. Of all the strategies I could choose from—close reading, teacher-led lectures, readings for homework driven by end-of-chapter quizzes, direct instruction, and so on—it became clear that reciprocal teaching talk groups would lead to the strongest outcome. Why? Because first it would lead to mastery of both the unit and lesson objective. The thinking required to question,

clarify, summarize, and predict about specific passages in a text really pushes students' deeper understanding of the content. So, I knew that this was a strong strategy.

"Next, I had to determine if it was appropriate for my students. The maturity of an eighth grader is different for each student. But I knew my students needed to begin working more independently, especially from me. Again, reciprocal teaching seemed to fit the bill. My students had been practicing each of the strategies for the entire year—I had them learning in groups since November—and they had been working on the social skills necessary to be effective as a learning team. For the majority of my class, they were up to the task. And the smaller groups I had them in let me monitor and manage those teams that needed the extra support.

"I also knew that the instructional strategy I selected needed to require a high level of active participation for each student. The individual roles in reciprocal teaching ensured this. And the students would hold one another accountable to participate."

Mr. Spicer also wanted to ensure that his students would be able to use these skills in a variety of situations—especially in high school. He wanted his students to own these strategies so they could increase the probability of their learning. He then had to determine the following:

- ‣ How will I share this information with my students?
- ‣ How will I check that my students understand the goals of the instruction?

Mr. Spicer explains, "We have focused on reading strategies from the beginning of the year. We discussed the value of having a variety of reading strategies at their disposal when reading anything—novels, poems, newspaper articles, biographies, the textbook, and so on. We discussed the need to learn and practice many different strategies to find out which ones work best for them. We discussed how the skills of reciprocal teaching—questioning, clarifying, summarizing, and predicting—form a nice schema to help categorize these strategies. And we discussed how the format of reciprocal teaching—working in small groups to make meaning—forms a nice process to help them understand how to learn from one another.

"Reciprocal teaching forces the cognitive load onto my students, which allows me to spend my time supporting the instruction. The small groups help me check for understanding, clarify any concerns, support the process of reading, support the process of gathering evidence, and differentiate for individual teams, as needed."

Mr. Spicer wanted his students to understand the value of owning their learning. He wanted to prepare them for high school and college. Therefore, he needed to think about the following question:

- ▸ How will my students understand that reflecting on the instructional aspects of the learning supports ownership of their learning?

Mr. Spicer says, "We have had many discussions about the value of making meaning from text and understanding how a reader goes about making meaning. For each new reading strategy, we discuss what it is, how to use it, how it can help a reader understand at a deeper level, and how to employ it in a variety of situations. My students are expected to use these strategies in other classes and report out how they have helped them."

Teachers like Mr. Spicer have realized that without this support—multiple opportunities to actively engage in the learning, interacting with instruction that is purposeful and leads to mastery and a deeper understanding of the learning, and reflecting on the use of these strategies in the future —his students will struggle with owning their learning.

What Teachers Are Doing

What are other ways teachers have implemented this practice—"Each and every student is supported by **opportunities** for **meaningful engagement** using **effective instructional strategies**"—as they offer support for developing student ownership?

Take this example from a sixth-grade language arts teacher: "I love going to professional development on instructional strategies—the more ideas I have, the better. I used to learn something new, and then I'd come back to class and use it until I got tired of it. However, I didn't spend as much time thinking about the learning outcome of the lesson or the needs of my students. I thought everything had to do with instruction. I now realize that while instruction is key, I can't make an effective decision about which strategy to

use until I have determined the skill to be learned in the lesson and the outcome that shows mastery. Once I have decided these, I can then figure out the best method for my students to learn that skill and produce that outcome."

Take this example from a high school mathematics teacher: "We learn a lot of procedures in our classes. I found that many of my students were just following the steps but not thinking about the math or their learning. This led to students who would encounter a challenging problem and immediately give up and say, 'I don't know how to do this one.' I knew I had to do a better job building their metacognition. We began to talk out loud as we solved problems. We would say what we already knew about the problem, what patterns we saw from previous problems, what the problem asked for, and what would be our first approach and why. We questioned one another and made our thinking visible. Talking about our thinking publicly helped my students understand the strategies they were employing and the decisions behind them. Not only has their math improved, but, equally important, their confidence has also improved."

Take this example from a primary teacher: "I tend to use direct instruction when my students are learning their basic decoding skills. Once they are able to decode but need to practice their comprehension, I tend to use close reading strategies. I use whichever strategy makes the most sense for the skill to be learned."

Take this example from an elementary science teacher: "I love teaching science and always have done a lot of experiments with my students. When I learned more about the new science standards, I realized I couldn't just have my students observe experiments if I wanted them to meet the standards. I needed my students to actively seek solutions, design investigations, and ask new questions. I needed to understand and utilize the method of inquiry. I also needed to be sure my students understood the difference and why it would help them. They were now going to have to think more like scientists and problem solve, use a variety of tools, collect and analyze information, synthesize information, and so on. I had to shift my strategies from what I have always done to what would help my students meet the standards."

Take this example from a high school psychology teacher: "For me, instruction is all about metacognition. I want my students to understand how they learn, what helps them and why, and what seems to hinder them and why.

I also want them to determine ways to utilize these strategies in a variety of educational settings. I have my students reflect on their learning and learning strategies every day."

What Students Are Saying

What do students say about this practice—"Each and every student is supported by **opportunities** for **meaningful engagement** using **effective instructional strategies**"—and its support for the ownership of their learning?

Take this example from a third grader: "When we are learning how to do something new in math, my teacher always shows us what it looks like first. We then do it together as an entire class. She has us work in pairs to practice even more. Finally, she has us try it on our own to see if we have learned it for ourselves. If not, she gives us more time to practice. This way of learning helps me, especially in math when I have to learn steps."

Take this example from a middle school student: "My teacher tells us each day our plan for learning. She lets us know why she chose what she chose. I can usually see why it makes sense. When we are learning something new, she does a lot of modeling and explaining. When we are practicing something, we usually do it with a partner so we can talk about what we are doing and how it is going. One day our teacher told us we were going to work in groups to read the next chapters. Some of us asked if we could read them on our own and had to tell her why. She let us because she said we understood how we learned best. I understand better now how I need to do things differently sometimes in order to get to the end goal."

Strategic Learning Practice, Instruction 3

Each and Every Student Is Supported by Opportunities for Meaningful Engagement in Which Instructional Time Is Used Efficiently

In order for students to own their learning in regard to instruction, each and every student must be able to answer the following questions:

- ▸ How much time do I have to learn this?
- ▸ How can I use my time most efficiently?
- ▸ How can these routines help me in the future?

In order for teachers to develop students who own their learning in regard to instruction, it is imperative that teachers support students with practices that are strategically implemented on a daily basis. This requires a focus on those practices that Kumar (1991) and Datta and Narayanan (1989) show increase the opportunities for learning by increasing the opportunities for student ownership. Our final Strategic Learning Practice, Instruction 3, states: "Each and every student is supported by **opportunities** for **meaningful engagement** in which **instructional time** is used **efficiently**."

First, let's define each aspect of this practice.

Opportunities are chances for students to be actively engaged. The greater the quantity and the higher the quality of these opportunities, the higher the probability of student learning.

Meaningful engagement happens in times when students participate in interactions that directly lead to increased understanding or mastery of the learning outcome.

Instructional time is the time allotted by the teacher for the unit or lesson. Once the unit or lesson begins, this time can become flexible to the needs of the learners.

Efficiently refers to the least amount of time required for the highest rate of learning. Nonproductive time is kept to a minimum.

The Practice in Action

What does this practice—"Each and every student is supported by **opportunities** for **meaningful engagement** in which **instructional time** is used **efficiently**"—look like in a classroom at the highest level? You might walk into Mr. Lee's geometry class and hear his class discussing the following learning outcome: "Students will draw and justify a geometric figure given a rotation, reflection, and translation by accurately utilizing transformation software to complete the activity."

That is what the students discussed. But what happens when you ask individual students about their learning?

You: "What are you learning?"

Student: "I am learning about rotations, reflections, and translations of geometric figures. We have been learning about each one throughout the week. Today we are doing all three to make certain we understand each one. We will need to draw the accurate transformations on trace paper and then on the math software. We also need to be able to justify why our drawings are accurate."

You: "When I first came into the classroom everyone was doing a paired activity. I noticed everyone ended the activity and went straight to discussing the learning outcome as a class. How did you all know to end the activity?"

Student: "Mr. Lee has a timer on the screen. Every day when we come into the room we have a warm-up activity. Sometimes we do it alone, sometimes with a partner. But we only have a set amount of time. When the timer ends, we stop."

You: "How does the timer help you?"

Student: "It is a quick activity, but sometimes at the beginning of class, it is easy to get distracted. The timer helps me know I have to get going right away. And we know each class will start this way. It is how we do things in Mr. Lee's class."

You: "How did you know who was going to be your partner today?"

Student: "At the beginning of the year, Mr. Lee assigned us partners. Now at the beginning of each week, we choose our own partner. If someone doesn't have a partner today, we add them to our group. We can't waste time trying to figure out who to talk to."

You: "I noticed that you are using your notebook during the lesson. How does your notebook help you?"

Student: "When we learn something new, we have to take really good notes. We know we have to refer to our notes first if we have a question, and then we can talk to a classmate. Only after that can we ask Mr. Lee. I try to do this now in all of my classes—take good notes, that is. It helps me find the answers when I get lost.

"One of the things I like best about Mr. Lee's class is that he has taught me to be more organized with my time. His routines have helped me save time in other classes—even if no one else is doing them."

Are you wondering how the student was able to answer your questions with such confidence? Let's find out from Mr. Lee.

"There are a lot of new skills in the geometry curriculum. I know that I do not have any time to waste. It is important to me that my class runs bell to bell. In order for this to happen, I need tight routines and a well-planned lesson. This takes a bit longer to establish at the beginning of the year, but once it is in place we can move at a good pace and focus on the skills and learning."

Mr. Lee used the Strategic Learning Practice, Instruction 3, as a frame to help him plan how he wanted to offer this support. This frame is flexible and fits the needs of both teachers and students. However, the following planning questions in table 2.8 helped him focus the support.

Questions to Guide Implementing Strategic Learning Practice, Instruction 3:

Each and every student is supported by opportunities for meaningful engagement in which instructional time is used efficiently.

Use these planning questions to focus your support.

	Notes
❑ What skill will my students learn, and how will they demonstrate they have learned it?	
❑ How much time will I allot to the learning?	
❑ How will I include meaningful student engagements in the allotted time?	
❑ How will I pace the lesson to keep all students active and participating?	
❑ What routines will I utilize to exclude nonproductive time?	
❑ How will I share this information with my students?	
❑ How will I check that my students understand the goals of effective pacing?	
❑ How will my students understand that reflecting on the instructional aspects of the learning supports ownership of their learning?	

Table 2.8: Questions to Guide Implementing Strategic Learning Practice, Instruction 3

Implementing the Practice

How did Mr. Lee use the questions in table 2.8 to help plan how he would offer support to his students? First, he had to determine the following:

▸ What skill will my students learn, and how will they demonstrate they have learned it?

Mr. Lee says, "We are focusing on the following standard: 'Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another.' We have learned about each transformation separately. Today I need to make certain the students understand them all and can differentiate one from the other. It's easy for students to confuse them. I knew I wanted them to have varied practice with the skill, so we will use both trace paper and the geometry software program. I also knew I would need them to articulate their learning because justifications are a must.

"This could be a lot for one class period, so I knew we would have to start right away and have quick transitions."

Mr. Lee then had to answer the following questions:

▸ How much time will I allot to the learning?

▸ How will I include meaningful student engagements in the allotted time?

▸ How will I pace the lesson to keep all students active and participating?

▸ What routines will I utilize to exclude nonproductive time?

Mr. Lee continues, "Since we have learned about each transformation, I was confident we could apply the learning in a variety of ways. I wanted to make sure the students had more than one opportunity to cement their understanding for each of them. And we only have this class period for this learning. I needed to utilize all of my routines to make sure we didn't waste any time.

"For example, we begin each class with a warm-up activity. The students know that it begins once they enter the room. They know to look up, read the activity expectation, and get to work. I used to tell them how much time they had. Now I have a timer on the screen that really helps them stay on

task. When the timer goes off, we get back together and go over the objective for the day. I never vary this routine. Each day begins the same way. This has also kept me on track.

"Next, we always review the objective. After that, I introduce the learning plan for the day. Today they will first complete the tracing-paper activity. Once completed, they have to check in with me for accuracy and be prepared to justify their answers. Once they complete this accurately, they move onto the iPad activity.

"We have a routine for iPad use. I know some teachers tend not to use them as they find there is too much hassle in keeping them charged and organized. We have an iPad cart and a set procedure for checking them out and returning them. I put that task onto the students. We decided on a process at the beginning of the year. They understand that they have to own their role in the process in order to utilize the iPads, which they love to use.

"We also have set routines when it comes to peer conversations—we don't have time to have them talk about anything other than geometry. And I need them to practice talking to all types of thinkers. I initially assigned them their partners, but once they showed me they were ready, I let them select their own. We do this each week."

But Mr. Lee wanted to help his students own this information so that he could increase the probability of their learning. To do this, he had to determine the following:

- ▸ How will I share this information with my students?
- ▸ How will I check that my students understand the goals of effective pacing?

Mr. Lee explains, "At the beginning of the year, I share the math standards for the course with each class. We discuss what the expectations of learning are for the year. I assure my students that my job is to make certain each student is successful, but this can only occur if we work as a class and really respect our math time. For the first couple of weeks, I introduce the routines we will use. I don't just tell them what the routine is, but why it is important to help us be superefficient and ensure that we, as a class, meet all of the course learning expectations. I know teenagers—I know I will have to continually review the routines throughout the year if we want to stay on course.

What I love is that the students began to monitor each other. You will hear one student tell another to get back to work. We don't have time to waste!"

Mr. Lee was very interested in making sure his students understood the value of owning their own learning. Thus, he had to ask himself the following question:

▸ How will my students understand that reflecting on the instructional aspects of the learning supports ownership of their learning?

Mr. Lee goes on by saying, "Our classes are bookended. We begin each class with a warm-up, and we end with a reflection. We share what we learned and how the lesson went. I ask my students to reflect on the pace of the lesson. Were parts of it too fast? Why or why not? Were parts too slow? I need them to see that I am always striving to make our learning more efficient. We also talk about their role in this—what went well and what needs to be improved. My favorite days are when they look up and realize the class is almost over and say, 'Wow, today went fast.' When that happens, I know I planned a good lesson."

Teachers like Mr. Lee have realized that without this support—ensuring all time is devoted to the learning, implementing routines that support the efficient use of instructional time, and offering sufficient and appropriate time for the determined objective—his students will struggle with owning their learning.

What Teachers Are Doing

What are other ways teachers have implemented this practice—"Each and every student is supported by **opportunities** for **meaningful engagement** in which **instructional time** is used **efficiently**"—as they offer support for developing student ownership?

Take this example from a biology teacher: "Because the content is so dense in high school science, it is important that my students know exactly what is going to happen in class on a daily basis. That is why they read the learning objective as soon as they walk in the door. We then discuss anything that needs to be clarified. At the beginning of the year, this routine took some time—I wrote it on the board, they discussed it with each other, and I clarified any questions they had. After a while, I wrote the objective at the top of

the day's agenda that they found in their Chromebooks. They still discussed it but without my guidance. A few minutes were saved this way. By spring, the students knew that they needed to understand the day's objective before we could begin. Some even came to class having read the agenda before the bell rang. The time needed to get the class going became shorter and shorter throughout the year. The kids knew the routine and followed it."

Take this example from an elementary teacher: "For my certification process, I had to record and reflect on one of my lessons. I quickly realized that I had too much downtime during transitions, both within a lesson and between lessons. I went to some of my colleagues and asked them what routines they had in place for transitions. The best piece of advice I got was to choose one routine and teach it well. I would have to define it for myself at the highest level. I would also have to model it, have clear expectations, model it again, reflect on it, and so on. Once I had it in place, I would add another. I now have a bank of routines that I use in my class. It has saved so much time."

Take this example from a middle school industrial arts teacher: "I made student conversations a priority this year. But I found it was taking too much time, and some students finished talking earlier and others seemed to need more time. I realized I had two problems. First, I needed better questions that gave the students more to discuss. But I also realized I didn't need every student to get to the 'end' of their conversation. My real goal was to have them express their thinking and push their learning at that moment. Once I had that goal clear, pacing became easier. I began to give my students a little less time than I thought they needed, and I used a timer. I needed them to have a sense of urgency and get their thinking out. I didn't need every student to talk until they ran out of things to say."

What Students Are Saying

What do students say about this practice—"Each and every student is supported by **opportunities** for **meaningful engagement** in which **instructional time** is used **efficiently**"—and its support for the ownership of their learning?

Take this example from a high school student: "My trigonometry teacher runs a tight ship. We walk in the class and start right away. But I don't mind it. We learn so much, and the class goes by so quickly. Other classes seem to

take forever, and sometimes I don't even know the point. Mr. Garcia makes sure we know what the objective is every day, and then every minute we work on it. Some days my brain hurts when I leave his class."

Take this example from a kindergarten student: "We get to do centers every day. Our chart tells us where to go. We have to put our center back neatly before it ends. When Mrs. Lacey puts on the song, we have to clean up and come to the rug before the song ends."

Take this example from a seventh grader: "The routines we use in our science class have helped me organize better. The way we organize our notebooks and the way we take notes help me because I can do it the same way in other classes. My mom tells me that my backpack now doesn't look like a black hole. I also am more comfortable talking to other kids—in science we have to justify our answers, and the teacher makes us talk to everyone. I know how to begin a conversation and share my ideas. Even in classes that aren't as organized, I can still begin a conversation and share my ideas fairly quickly."

Instruction Reflection

How Well Do You Develop Students to Own How They Are Learning?

In this chapter, we have shown you what student ownership looks like in practice. We have shown you what it sounds like when students own their part in instruction. And we have given examples of how teachers have implemented these strategic learning practices in a variety of classrooms.

We have also explained the difference between a student who is simply *doing* or *understanding* instruction and one who is *owning* what they are learning.

A student is *doing* when they can state how they need to complete the task in front on them.

A student is *understanding* when they can explain what strategy they are engaged in.

A student is *owning* how they are learning when they can articulate the strategy they are currently using to learn, how this strategy supports their learning, and how they will use this strategy in the future—during the class, in other classes, and when they are working on their own.

Think of your students. Where do they fall on the doing-understanding-owning continuum? Think about the supports they need from you to develop student ownership. How often and to what degree do you offer these supports? In other words, what impact do you have on student ownership?

Remember what John Hattie (2011) said: "Such passion for evaluating impact is the single most critical lever for instructional excellence—accompanied by understanding this impact, and doing something in light of the evidence and understanding" (pg. viii).

What follows are reflection activities that will help you determine your impact on student ownership—both areas of strength and areas of growth.

In order to develop student ownership, all student learning must be driven by highly engaging, effective, and efficient instruction.

And, as always, your actions are key to the development of student ownership.

Reflect on Strategic Learning Practice, Instruction 1

Each and every student is supported by opportunities for meaningful engagement using structured student-to-student communication.

Consider how your students respond to the following questions:

- ‣ How does engaging in conversations with my peers push my learning?
- ‣ How do I participate in these conversations?
- ‣ What is my role as both a speaker and a listener?

Think about your students' responses—remembering that your support is directly linked to developing student ownership—and use the following to help you reflect on the strengths and gaps of your support.

How often and how well do you offer these supports?

- Student communications build toward mastery of the relevant standards and measurable and achievable learning outcomes.

- Multiple and varied opportunities for student communication are provided.

- Student communications are structured to provide rigorous and high-quality conversations.

- Structured communications include reciprocal speaking and listening opportunities for each student.

Table 2.9: Reflect on Strategic Learning Practice, Instruction 1

Reflect on Strategic Learning Practice, Instruction 2

Each and every student is supported by opportunities for meaningful engagement using effective instructional strategies.

Consider how your students respond to the following questions:

▸ How does engaging in this instructional strategy support my learning?

▸ How can I use this instructional strategy in the future?

▸ What is the value of reflecting on my learning?

Think about your students' responses—remembering that your support is directly linked to developing student ownership—and use the following to help you reflect on the strengths and gaps of your support.

How often and how well do you offer these supports?

- Instructional strategies build toward mastery of the relevant standards and measurable and achievable learning outcomes.

- Instructional strategies require a high level of active participation.

- Instructional strategies account for the differing needs of your students.

- Reflection on the purpose and value of the instructional strategy is required of students.

Table 2.10: Reflect on Strategic Learning Practice, Instruction 2

Reflect on Strategic Learning Practice, Instruction 3

Each and every student is supported by opportunities for meaningful engagement in which instructional time is used efficiently.

Consider how your students respond to the following questions:

- ‣ How much time do I have to learn this?
- ‣ How can I use my time most efficiently?
- ‣ How can these routines help me in the future?

Think about your students' responses—remembering that your support is directly linked to developing student ownership—and use the following to help you reflect on the strengths and gaps of your support.

How often and how well do you offer these supports?

- All time is used to meaningfully engage students toward mastery of the relevant standards and measurable and achievable learning outcomes.

- The pace keeps all students actively participating.

- Routines are used to maximize instructional time and exclude nonproductive time.

Table 2.11: Reflect on Strategic Learning Practice, Instruction 3