# Chapter 1

## **Routine Informative Assessments**

Every Day — Flow

# **SCENARIO** (Reader's Theater)

## All Day, Every Day!

The scene is Star Middle School, with a new teacher, Ms. Juarez, and a veteran teacher, Mr. Brant. This is taking place during their lunch break, and they are talking about a math lesson that had occurred earlier that morning. Their discussion centers on student involvement and feedback during a lesson in Ms. Juarez's class.

#### Ms. Juarez

We just had a great discussion in my geometry class this morning about how to develop proofs for theorems. A couple of students dialogued back and forth for a few minutes and really seemed to understand the key strategies to use. My concern is that the rest of the students were not that engaged. They were attentive and they looked like they were listening, but I really don't know what they know or what they don't know.

#### Mr. Brant

As part and parcel of my lessons, I use a host of strategies to get feedback during those lessons. I want to know if it "takes" or not. I want to know if the kids really get it or if they're lost. I use a whole array of formative assessments to get that feedback.

#### Ms. Juarez

Formative assessments? I'm not sure what you mean by that, but I do assess the class after the lesson. I usually use those tests for a grade in the grade book. It gives me a read on where they are on that skill or concept.

#### Mr. Brant

Well, these kinds of assessment are a little different. They are more like touchbacks, to get immediate feedback during the lesson itself. Formative assessments inform. They are the ways I use to find out if the kids are on track with the lesson or if they need another swing at it.

#### Ms. Juarez

Oh, I see what you mean. Formative assessments are like check points along the way.

#### Mr. Brant

That's right. I even call these assessments "informative assessments," rather than formative assessments, to make the point very clear that they are used to inform. In fact, they are not about a grade at all. They are tools and techniques I use all day long, every day, to maximize feedback from students.

#### Ms. Juarez

That's exactly what I think was missing from the dialogue this morning. It was just between the two kids. While I felt they did have a good understanding of the lesson, I was not sure how everyone else had fared.

#### Mr. Brant

Exactly! That's my point. We need student feedback, all day, every day, to temper our lesson accordingly.

#### Ms. Juarez

Would you tell me more about this idea of informative assessments if I come by after school? I would love to have some concrete ideas that I could use right away in my classes.

#### Mr. Brant

Absolutely! Come by after school, and I will show you some tools and techniques I use all of the time. They are part of all of my lessons. In fact, I guess you could say that these assessments are woven into the lessons. The instruction and assessments are seamless. They occur almost simultaneously, with quick checks throughout the lesson, to be sure all the students are on board.

#### Ms. Juarez

I can't wait to talk more! I'll be down as soon as the kids are gone, today.

#### Mr. Brant

Okay! I'll get some things together for you. See you later.

# **Teachings**

# Defining Routine Informative Assessments

To define the concept of Routine Informative Assessments, it is necessary to unpack the word routine. Routine, in the context of classroom instruction, means standard things that occur, tactics or strategies, performed with regularity, as part of the day-to-day occurrences. In brief, routine refers to happenings that fit into the scheme of things on a daily basis. All day long, every day of the week, these Routine Informative Assessments occur as an essential occur.

Routine, in the context of classroom instruction, means standard things that occur.

Routine Informative Assessment is to be interpreted as the daily "activities undertaken by the teachers and/or by their students, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged" (Black & Wiliam, 1998, p. 142).

# Describing Routine Informative Assessments

Routinely, these assessment strategies are woven into the daily schedule of instructional events and are inexplicably linked to the instructional tenor of the classroom. They are simple, repetitious assessment strategies, threaded

throughout the instruction. The purpose is to inform, to provide immediate, continual, and valuable feedback from students that signals a need for adjustments and modifications in the instruction.

To that end, maximizing student feedback, Routine Informative Assessments become a regular and integral part of the instructional scene. In fact, these are as routine as taking attendance or lunch count, setting classroom rules, or assigning homework. Routine Informative

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Assessments are as common to good classrooms as building vocabulary in each lesson or unit, or checking math calculations for accuracy. These all-day, everyday assessments are as routine as the communication skills of reading, writing, speaking, and listening. They are, indeed, part and parcel of the moment-to-moment, hour-to-hour, lesson-to-lesson dynamics of the quality K–12 classroom.

# Examples of Routine Assessments That Inform

First and foremost, Routine Informative Assessments are the routine. These kinds of assessments include a number of strategic measures that teachers regularly use within the discourse of the classroom interactions. Among the most frequently used routine assessments that inform instructional practice are student response devices. These are strategies to foster equal opportunity for response and robust, varied, and effective questioning and response strategies.

More specifically, student response devices can be handmade and handheld signal cards or more sophisticated portable, electronic devices that signal agreement, disagreement, or multiple-choice answers. Strategies that promote equal opportunity for responses



among all students in the class or in the group include name cards, a deck of cards, a fishbowl kind of name drawing, or even color-coded tongue depressors with student names on them. Robust questioning strategies include rhetorical and woven questions, as well as more complex questions for probing and delving for more comprehensive and revealing responses.

In the next several sections of the chapter, titled Tools, Techniques, Tasks, and Tips, this set of routine assessments will be delineated more fully. Each is explained comprehensively, examples are drawn, an activity for immediate use is included, and tips are given to clarify the implementation processes. Of course, the goal is to motivate practical application of these vital assessment ideas to improve classroom practices.

For clarification, the distinction made between tools and techniques is a deliberate one. *Tools* are often objects and manipulatives, specific instruments that can be used in the classroom for immediate and relevant student feedback. They are often reusable and become an integral part of the daily instructional methodology.

On the other hand, techniques comprise more intricate tactics and strategies. Routine Informative Assessment techniques are often customized and tailored to the specific teaching and learning situation. Techniques may vary in their targeted use by complexity, intensity, and duration, depending on the particular instructional circumstance.

The tasks are selected to demonstrate an immediate application, while the tips assist with the whys and wherefores of actual implementation in K-12 classrooms. In the end, these last sections of the chapter are intended to lead the reader to clearer understandings by illustrations of actual applications.



# **Tools**

## **Routine Handmade Tools**

One of the easiest and most frequently used sets of tools is gathered here under the heading of handmade tools. These simple, low-tech tools are easily obtained or created by the classroom teacher. These are tools used by teachers who are focused on maximizing student feedback through multiple opportunities to respond and through signaling

These simple, low-tech tools are easily obtained or created by the classroom teacher. devices that make those responses visible and assessable. Among the listing of handmade tools for maximizing feedback are traffic light cards, color-coded multiple choice cards, individual lap boards, tongue depressors, name cards, and a deck of cards.

# **Traffic Light Cards**

Traffic light cards consist of three cards that simulate the traffic light: green, yellow, and red. As the teacher proceeds with the lesson, students are prompted to self-assess their understanding at that point and signal:

Green—Go! I'm on board (teacher notes and continues if majority are okay)

Yellow—Slow down! I'm coming (teacher pauses, student collaborates)

Red—Stop! I'm confused (teacher clarifies concern and adapts accordingly by reteaching the whole group if necessary, pulling a small group aside for a new approach, or making adjustments for the next lesson step that is needed)

# **Color-Coded Multiple Choice Cards**

Using three or four letter-coded cards (A, B, C, D), students are engaged and involved as they signal their choice for



options displayed by the teacher. This is an effective way to begin a lesson (prior knowledge), to use during the lesson (monitoring key concepts), and at the end of a lesson (checking for understanding).

# Lap Boards

Lap boards may be individual white boards, blackboards, or magnetic (Etch-a-Sketch) boards, but in all cases, the students use the boards to signal a response to the posed question. Teachers utilize this tool for mental math drills  $(3 \times 12)$ , spelling drills (rhyming words) comprehension questions (to which character do you relate the most?), concept development (symbol for carbon dioxide), or even simple classification knowledge (name a type of rock).

## **Tongue Depressors**

Simple tongue depressors, or color-coded tongue depressors, serve as tools for a well-researched phenomenon that occurs in typical classrooms. The concept of equal opportunity to respond is part of the Teacher Expectation, Student Achievement Study (Kerman, 1979), which calls attention to the inadvertent teacher behavior of consistently calling on the same students rather than ensuring every student the opportunity to answer. By using tongue depressors with students' names on them, the teacher has a structure to guide this process and allow all students a chance to respond.

## Name Cards and Fishbowl

Name cards are similar to the tongue depressor tool. The names of students are placed in a fishbowl, and the teacher randomly draws names throughout the lesson. In essence, the concept of equal opportunity to respond is activated. According to the research cited earlier, this modified teacher behavior of promoting and expecting responses from all students is part of the process of setting high expectations for all learners.



## **Routine Electronic Tools**

The idea of maximizing feedback has developed into a viable and desirable strategy for the quality classroom. Thus, in addition to the aforementioned homemade responders, technology solutions are also available for many schools, currently focused on integrating technology into the curriculum. While two such devices are described here, they are by no means the only ones on the market or in the schools. Yet, for the techno-savvy, these electronic responders are compelling tools for today's classrooms.

# Responders or "2Know!"

Classroom response systems like Renaissance Learning's "2Know!" encourage engagement and are powerful tools for teachers to use to maximize feedback. Teachers pose questions, verbally or on a screen, students respond, and the system instantly processes and graphs the responses. While teachers can use various low-tech options outlined herein (e.g., response cards), one indisputable benefit of response systems is that they allow students to respond with anonymity. Additionally, they are more accurate. While a teacher would have to approximate correct response rates through low-tech options, the use of response systems allows the teacher to view exact data on the students' responses.

### NEO<sub>2</sub>

Another tool, in the form of a compact, portable keyboard device, is the NEO 2, produced by Renaissance Learning. While this is an effective and affordable classroom tool for learning keyboarding and writing, it also serves as a student responder device. Students log in and respond much like they do with a simple response system. Additionally, NEO 2 creates a mini classroom network, allowing students to print work through the teacher's workstation and share their assignments efficiently with peers and their teacher.

# **Routine Questioning Tools**

There are two question sets that easily become part and parcel of the classroom questioning toolbox. One set of questions urges students to elaborate on their thinking with more depth by giving specific illustrations of their thinking, and the other set prompts students to access prior knowledge for greater comprehension.

## Mr. Pete's Questions

One of the simplest and most straightforward tools for routinely assessing student thinking is a set of questions called Mr. Pete's Questions, which were developed by Brian Pete. These questions are follow-up questions to a student response that usually elicit a whole paragraph of meaning. For example, after a student has offered a one-word response to the question posed by the teacher, the teacher follows up with the following:

Teacher Response 1: Tell me more.

Teacher Response 2: Can you give me an example of that?

Teacher Response 3: How do you feel about that?

Notice that each of the follow-up questions builds on the previous one. But please also note that the teacher may choose to use any or all three of the follow-up questions.

### Mr. Parnes' Questions

Mr. Parnes' Questions originated with Sidney Parnes, of Buffalo State College. Parnes advocated these two questions as a way to take learning to a new level. Indeed, by helping students access these simple tools, teachers will dictate a higher level of thinking about the new learning.

Question 1: How does this connect to something you already know?

Question 2: How might you use this in the future?



By activating prior knowledge and by pushing for transfer, use, and relevant application, Mr. Parnes' Questions are questions that can be used all day, every day, to prompt self-assessment as well as teacher observational assessments. By virtue of the questions themselves, there is enough student feedback to alter the instructional focus for certain students if warranted.

# **Techniques**

Included in this section are techniques to utilize classroom questioning and response strategies, cooperative learning techniques, teacher expectations, and vocabulary to inform instruction. These forms of assessment are designated as techniques or strategies, as they vary greatly within the context of their applications. Yet these techniques are intended to provide valued information to the students and the teacher about their mastery of the material.

Questioning techniques move from higher-order thinking questions, which probe and delve for more depth, to new ways to think about questions to spark discussion. Cooperative structures are addressed with some detail to rules and routines that elicit more involvement and engagement from all students. Finally, the idea of teacher expectations and basic verbal skills are discussed in terms of providing evidence-based work for informative assessment purposes.

# **Routine HOT Questioning Techniques**

To begin this important discussion about questioning strategies as powerful techniques for ascertaining student knowledge and understanding, there are several protocols that seem to guide the art of the classroom questioning process. These are often seen as part of the quality instructional scene in every classroom around the world.

They include the following four simple behaviors:

1. Pose the question.

Use open-ended, divergent questions that allow various responses, based on reasoning and logic.

2. Allow wait time.

Pause three to ten seconds after posing the question; allow time for students to think and compose a worthy response.

- Choose a respondent using a random method.
   Revisit the tools section above and use one of the ideas provided to give the opportunity for all students to respond.
- 4. Provide some "save face" option!

Let students confer and explore answers together before they offer responses. Maybe ask for no hands up, with the understanding that all students should be prepared to respond, at all times (Black, Harrison, Lee, Marshall, & Wiliam, 2003).

With that in mind, let's take a more philosophical look at questioning techniques that provide Routine Informative Assessments for the knowing teacher. Art Costa has said teachers actually dictate the level of thinking by the kinds of questions they ask (Costa & Kallick, 2000). Along the same line of thought, another great thinker, Oliver Wendell Holmes, frames the questioning issue in a stunning metaphor, known as "The Three Story Intellect."

[There are] [o]ne-story intellects, two-story intellects, three-story intellects with skylights. All fact collectors, who have no aim beyond their facts, are one-story [minds]. Two-story [minds] compare, reason, generalize, using the labors of the fact collectors as well as their own. Three-story [minds] idealize,

imagine, predict; their best illumination comes from above, through the skylight.

 Oliver Wendell Holmes, The Poet at the Breakfast-Table (p. 44)

Using the concept of the three-story intellect as a guide, teachers frame their questioning with rigor and richness. In turn, students frame their responses with equal rigor and richness. The level of discourse is truly guided by the question stimulus.

As a side note, there is an easy way to think about higher-level questions. The technique uses the idea of fat and skinny questions to designate divergent questions from convergent questions. It is a technique that helps teachers and students alike. It gives them an easy way to talk about the levels of student response. Fat questions require elaboration to answer. They need a whole-paragraph response, while skinny questions demand a simple "yes," "no," or "maybe so." It's just another look at the idea of raising the level of the classroom discourse for informative assessment data.

## **Rhetorical Questions**

The use of rhetorical questions during an input session is the first level of interaction. Rhetorical questions punctuate the lecture with a moment to pause and think about what has just been presented. For example, a

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rhetorical question such as "Wouldn't you agree?" causes the listener to respond mentally. The internal pause to think and to react is internal, but nonetheless, it creates just the slightest bit of interactivity. Again, the purpose is not to elicit an actual recordable response, but simply to garner a personal reaction.

The rhetorical question may be revisited. "Remember when I asked you if you agreed with my theses? Would

anyone be willing to share that thought with the rest of us?" This is a glimpse at reactions that is an emerging form of formative assessment. It gives a little notion of what students might be thinking.

## **Woven Questions**

Woven questions are just that. They are often directed to a particular student. They are deliberate and purposeful and are literally woven into the lecture for the explicit purpose of creating a conversation: "Derek, what is one aspect of Watson's theory that bothers you?" Whatever the response, both the teacher and students have a reading on the situation. The teacher may also follow up with a second student, to make the feedback more plentiful: "Amy, how do you feel about what Derek just said?" Both questions are woven into the lecture scenario, are openended, and provide a form of feedback that illuminates the learning.

# **Probing**

Probing questions push the learner to go further, to elaborate, to give more detail, add more depth. The questions probe for clarification of various facets of an idea. A probing question often follows an initial question. The following are examples:

### Teacher:

"Dee, do you believe we have environmental issues about climate changes?"

#### Student:

"Yes, I have seen lots of stuff in the news and documentaries about this."

#### Teacher:

"Can you give us some telling details that distinguish your concerns about the environment and climate change?"

Student:

"Well, I know there is a thing called global warming, that is melting the icebergs and putting the polar bears at risk."

Notice how the probing question got to specific information that illustrates the problem. This is what the skillful teacher uses to probe for the level of understanding.

# **Delving**

Delving is another strategy that takes questioning to a deeper level. To delve is to go deeper into a fact or a piece of data. It unpacks the idea with further relevant information. For example, the teacher may use delving questions to target the goal of a project. An example that comes to mind occurred in a second grade classroom. The teacher was integrating a science unit on energy and matter with a language arts lesson on narratives. After reading the story about "The Pudding Night," the students were busy making pudding. They were shaking a container with instant pudding powder and water to turn it into pudding. When the teacher asked the students what they were doing, they replied, "Making pudding." Then she delved deeper by saying, "Yes, that's true. But can you explain how making pudding helps us understand the idea of changes in the state of matter?" By delving deeper with the class, their connections will be revealing of their understanding of the science behind the pudding theme.

# **Reverse Questioning Policy**

Another questioning idea that may be new on the scene is the "reverse question policy" used to stimulate student-asked questions. With the "hands up only to ask a question" policy, a subtle message is being relayed to students: No need to raise your hands, as everyone is expected to be ready to respond to my questions, and there are cooperative structures in place to help everyone

feel prepared; however, if you want to pose a question for the rest of us, you may raise your hand to do so. Surely, the posed questions will help guide instructional decisions as students reveal what they are thinking about. It is yet another way to get feedback for informative assessment purposes. It is a policy that will evolve over time, as kids become more comfortable with the changes in expected interactions.

# Routine Informal Cooperative Learning Techniques

Cooperative learning, all day, every day, is a powerful and often underused strategy to provide Routine Informative Assessment information. It is also the number one strategy to increase student achievement and self-esteem (Johnson & Johnson, 1988).

In addition, it is an effective and versatile way to make your lecture, stand-up teaching, or whole-class instruction more interactive. The following are three simple, quick and slick ways to advocate interactive feedback for assessing student understanding.

# "Turn to Your Partner, and . . . " (TTYPA . . .)

"Turn to your partner, and . . ." (TTYPA . . .) is an amazing strategy that is used in lecture halls across the nation. It is the pause on the commentary that allows students to make sense of the flow of incoming data. Once students have had a moment or two to talk, the teacher may sample a few comments for valued feedback.

#### Shoulder Partner

By using the same TTYPA . . . strategy, with the idea of a shoulder partner, teachers can switch up the mix by saying, "Now, turn to your other shoulder partner." Of course, teacher sampling must follow if there is to be any verbal feedback from students that the teacher can act on.



#### Elbow Partner

Again, when using the idea of partners talking to encourage and maximize feedback, "turn to your elbow partner" is often used when students are sitting at tables. This is to direct the dialogue with partners next to each other, as opposed to across from each other. This is helpful when they are sharing materials or doing lab work. Yet, to reiterate, the teacher must seek some shared responses if the feedback is to be useful for directing or redirecting the instructional flow.

# Routine Teacher Expectation, Student Achievement (TESA) Techniques

Without repeating all of the research around the idea of TESA, it seems prudent to note the philosophy (Kerman, 1979) and a few of its axioms that directly relate to the

The research on teacher expectations and the impact of student achievement posits the inextricable link between the two. idea of Routine Informative Assessments. The research on teacher expectations and the impact of student achievement posits the inextricable link between the two. When teachers have high expectations for all students, when the students believe that the teacher believes in them, student behaviors improve and achievement goes up.

Several teacher behaviors that are commonly understood, yet not always promoted, are wait time, equal opportunity to respond, delving, and praise. While several have already been discussed, they appear here as well, to give testimony to the incredible impact teacher expectations have on student achievement. These are not only Routine Informative Assessment techniques that yield much data teachers can use to inform their practice, but these four strategies are also proven behaviors that foster student empowerment.



## **Wait Time**

Wait time is a technique that requires the teacher to pause three to ten seconds following a question. It is such a simple behavior, or nonbehavior if you will, yet is so hard to actually do. It slows down the pace of the traditional classroom discussion; it changes the flow. Wait time works if teachers work it. It gives time to think to those students who are not the fastest to raise their hands, or the loudest to raise their voices.

# **Equal Opportunity to Respond**

While this has been thoroughly exposed earlier, with tongue depressors, cards, and fishbowls, it still seems necessary to reiterate the power of this strategy when trying to maximize feedback for Routine Informative Assessment focus. When everyone talks, everyone has the privilege of learning, because the adage, "The person doing the talking is the person doing the learning," is absolutely the truth. Students must be able to say it in their own words to own it! Period!

# Delving

Delve for depth. Get more information. Know that the student understands. That is what this strategy is all about. Enough said, as it has been developed earlier in this section.

### **Praise**

Giving specific praise is what is advocated in TESA as a motivation for increased student achievement. It is mentioned here for the purpose of citation, as a Routine Informative Assessment technique. However, it is more fully developed on page 48, in reference to teacher feedback, as described and illustrated by Wiggins (2008).



# Routine Vocabulary Building and Comprehension Techniques

Costa and Kallick (2000), in their book *Discovering & Exploring Habits of Mind*, address robust dispositions that include precision, accuracy, perseverance, and even creativity. These are long-term attitudes that become instilled in students as they move through a strident system of teaching, learning, and assessing. The path goes from dependent thinkers to independent problem solvers and on toward interdependence with others in collaborative endeavors.

To truly understand the habits of mind, the concepts themselves must be dissected and analyzed in order to know the many facets of meaning. That is exactly what quality teachers do as a Routine Informative Assessment technique to improve student performance. The technique is called unpacking the language and it becomes a vital skill, as students learn to assess their understanding of the expectations laid out in the standards, the assignments, and the tests.

# **Unpacking the Language**

Unpacking the language is a ripe opportunity to assess student understanding of the language of standards, as well as the language of the tests.

Unpacking the language is a ripe opportunity to assess student understanding of the language of standards, as well as the language of the tests, the assignments they do, and the tests they take. It is another Routine Informative Assessment technique that is easily woven into everyday lessons and the daily, weekly, and end-of-course tests, and, naturally, for high-stakes tests as well.

To unpack the language of the action words embedded in instructions and directions, include simple words that students do read, but it's almost a "read over." They often don't connect with the authentic meaning and thus fail to execute the task as it is presented to them.

Students typically stumble over words such as explain, compare, analyze, outline, argue, discuss, demonstrate. These are the words that often trip them up and consequently cause them to make mistakes, go in the wrong direction, and even lose points because of misunderstandings or misconceptions of the expectations. When teachers regularly help students "unpack the language," they become privy to the interpretation students take away from the text. It illuminates many of the problems kids face as they attempt to do their daily work.

Unpack the Word: "Analyze"; first define, then apply!

Define: To take apart, look at the parts, divide in smaller parts; find key elements.

Apply: Analyze this statement: "Great events make great men/women!"

Great means really super or grand, events means happenings and men/women means people. Therefore, the statement means, "Grand happenings create super people."

Now, while this seems like a ridiculous exercise in redundancy, it is necessary for many students to go through this kind of dissection in order to see the real or sometimes hidden meanings. In the end, it reveals what students are thinking and affords opportunity to redirect misguided ideas.

# Tasks

# Handmade Signals

Distribute three sticky notes, of three different colors, to students. Assign three signals to the colors:

Blue—Agree Yellow—Not Sure

Pink—Disagree

Then, present a set of ten statements about the concept under study and have the students simply hold up the appropriate card to signal their response. Have them hold up blue for agreement, yellow for undecided, and pink for disagreement.

Tally the response for each, on chart paper. Debrief with a discussion that concludes with revisions for correct answers.

Then ask students to comment on what the distribution of tally marks signals about the level of student understanding in the class as a whole. Keep the conversation constructive and safe by stressing that signaling is a tool you will be using this year for routine formative assessments, which inform students and teachers alike.

# **Tips**

- **Tip 1:** The most important "take away" is that Routine Informative Assessments are easy to thread into the daily happenings of classroom interactions. If you are already using many of the tools and techniques listed in this discussion, keep doing them and try to do them even more frequently.
- **Tip 2:** Also, just to push yourself, select one that is new and commit to trying it right away.
- **Tip 3:** As a professional learning community, incorporate journals of all routine assessments regularly to use in your classrooms and to share among colleagues.