Component 3a:	Communicating with Students

Teachers communicate with students for several independent, but related, purposes. First, they convey that teaching and learning are purposeful activities; they make that purpose clear to students. They also provide clear directions for classroom activities so that students know what to do; when additional help is appropriate, teachers model these activities. When teachers present concepts and information, they make those presentations with accuracy, clarity, and imagination, using precise, academic language; where amplification is important to the lesson, skilled teachers embellish their explanations with analogies or metaphors, linking them to students' interests and prior knowledge. Teachers occasionally withhold information from students (for example, in an inquiry science lesson) to encourage them to think on their own, but what information they do convey is accurate and reflects deep understanding of the content. And teachers' use of language is vivid, rich, and error free, affording the opportunity for students to hear language used well and to extend their own vocabularies. Teachers present complex concepts in ways that provide scaffolding and access to students.

The elements of component 3a are:

- Expectations for learning
  The goals for learning are communicated clearly to students. Even if the goals are not conveyed at the outset of a lesson (for example, in an inquiry science lesson), by the end of the lesson students are clear about what they have been learning.
- Directions for activities
  Students understand what they are expected to do during a lesson, particularly if students are working independently or with classmates, without direct teacher supervision. These directions for the lesson's activities may be provided orally, in writing, or in some combination of the two, with modeling by the teacher, if it is appropriate.
- Explanations of content
  Skilled teachers, when explaining concepts and strategies to students, use vivid language and imaginative analogies and metaphors, connecting explanations to students' interests and lives beyond school. The explanations are clear, with appropriate scaffolding, and, where appropriate, anticipate possible student misconceptions. These teachers invite students to be engaged intellectually and to formulate hypotheses regarding the concepts or strategies being presented.
- Use of oral and written language
  For many students, their teachers' use of language represents their best model of both accurate syntax and a rich vocabulary; these models enable students to emulate such language, making their own more precise and expressive. Skilled teachers seize on opportunities both to use precise, academic vocabulary and to explain their use of it.

Indicators include:

- Clarity of lesson purpose
- Clear directions and procedures specific to the lesson activities
- Absence of content errors and clear explanations of concepts and strategies
- Correct and imaginative use of language

	Ineffective	Developing	Effective	Highly Effective
3a: Communicating with Students	The instructional purpose of the lesson is unclear to students, and the directions and procedures are confusing. The teacher's explanation of the content contains major errors and does not include any explanation of strategies students might use. The teacher's spoken or written language contains errors of grammar or syntax. The teacher's academic vocabulary is inappropriate, vague, or used incorrectly, leaving students confused.	The teacher's attempt to explain the instructional purpose has only limited success, and/or directions and procedures must be clarified after initial student confusion. The teacher's explanation of the content may contain minor errors; some portions are clear, others difficult to follow. The teacher's explanation does not invite students to engage intellectually or to understand strategies they might use when working independently. The teacher's spoken language is correct but uses vocabulary that is either limited or not fully appropriate to the students' ages or backgrounds. The teacher rarely takes opportunities to explain academic vocabulary.	The instructional purpose of the lesson is clearly communicated to students, including where it is situated within broader learning; directions and procedures are explained clearly and may be modeled. The teacher's explanation of content is scaffolded, clear, and accurate and connects with students' knowledge and experience. During the explanation of content, the teacher focuses, as appropriate, on strategies students can use when working independently and invites student intellectual engagement. The teacher's spoken and written language is clear and correct and is suitable to students' ages and interests. The teacher's use of academic vocabulary is precise and serves to extend student understanding.	The teacher links the instructional purpose of the lesson to the larger curriculum; the directions and procedures are clear and anticipate possible student misunderstanding. The teacher's explanation of content is thorough and clear, developing conceptual understanding through clear scaffolding and connecting with students' interests. Students contribute to extending the content by explaining concepts to their classmates and suggesting strategies that might be used. The teacher's spoken and written language is expressive, and the teacher finds opportunities to extend students' vocabularies, both within the discipline and for more general use. Students contribute to the correct use of academic vocabulary.
Critical Attributes	• At no time during the lesson does the teacher convey to students what they will be learning. • Students indicate through body language or questions that they don't understand the content being presented. • The teacher makes a serious content error that will affect students' understanding of the lesson. • Students indicate through their questions that they are confused about the learning task. • The teacher's communications include errors of vocabulary or usage or imprecise use of academic language. • The teacher's vocabulary is inappropriate to the age or culture of the students.	• The teacher provides little elaboration or explanation about what the students will be learning. • The teacher's explanation of the content consists of a monologue, with minimal participation or intellectual engagement by students. • The teacher makes no serious content errors but may make minor ones. • The teacher's explanations of content are purely procedural, with no indication of how students can think strategically. • The teacher must clarify the learning task so students can complete it. • The teacher's vocabulary and usage are correct but unimaginative. • When the teacher attempts to explain academic vocabulary, it is only partially successful. • The teacher's vocabulary is too advanced, or too juvenile, for students.	• The teacher states clearly, at some point during the lesson, what the students will be learning. • The teacher's explanation of content is clear and invites student participation and thinking. • The teacher makes no content errors. • The teacher describes specific strategies students might use, inviting students to interpret them in the context of what they're learning. • Students engage with the learning task, indicating that they understand what they are to do. • If appropriate, the teacher models the process to be followed in the task. • The teacher's vocabulary and usage are correct and entirely suited to the lesson, including, where appropriate, explanations of academic vocabulary. • The teacher's vocabulary is appropriate to students' ages and levels of development.	• If asked, students are able to explain what they are learning and where it fits into the larger curriculum context. • The teacher explains content clearly and imaginatively, using metaphors and analogies to bring content to life. • The teacher points out possible areas for misunderstanding. • The teacher invites students to explain the content to their classmates. • Students suggest other strategies they might use in approaching a challenge or analysis. • The teacher uses rich language, offering brief vocabulary lessons where appropriate, both for general vocabulary and for the discipline. • Students use academic language correctly.

Analyzing Teaching and Learning Using Multiple Lenses

	Ineffective	Developing	Effective	Highly Effective
Possible Examples	• *A student asks, "What are we supposed to be doing?" but the teacher ignores the question.* • *The teacher states that to add fractions they must have the same numerator.* • *Students have a quizzical look on their faces; some may withdraw from the lesson.* • *Students become disruptive or talk among themselves in an effort to follow the lesson.* • *The teacher uses technical terms without explaining their meanings.* • *The teacher says "ain't."* • *And others…*	• *The teacher mispronounces "____."* • *The teacher says, "And oh, by the way, today we're going to factor polynomials."* • *A student asks, "What are we supposed to be doing?" and the teacher clarifies the task.* • *A student asks, "What do I write here?" in order to complete a task.* • *The teacher says, "Watch me while I show you how to _____," asking students only to listen.* • *A number of students do not seem to be following the explanation.* • *Students are inattentive during the teacher's explanation of content.* • *Students' use of academic vocabulary is imprecise.* • *And others…*	• *The teacher says, "By the end of today's lesson you're all going to be able to factor different types of polynomials."* • *In the course of a presentation of content, the teacher asks students, "Can anyone think of an example of that?"* • *The teacher uses a board or projection device for task directions so that students can refer to it without requiring the teacher's attention.* • *The teacher says, "When you're trying to solve a math problem like this, you might think of a similar, but simpler, problem you've done in the past and see whether the same approach would work."* • *The teacher explains passive solar energy by inviting students to think about the temperature in a closed car on a cold, but sunny, day or about the water in a hose that has been sitting in the sun.* • *The teacher uses a Venn diagram to illustrate the distinctions between a republic and a democracy.* • *And others…*	• *The teacher says, "Here's a spot where some students have difficulty; be sure to read it carefully."* • *The teacher asks a student to explain the task to other students.* • *When clarification about the learning task is needed, a student offers it to classmates.* • *The teacher, in explaining the westward movement in U.S. history, invites students to consider that historical period from the point of view of the Native Peoples.* • *The teacher asks, "Who would like to explain this idea to us?"* • *A student asks, "Is this another way we could think about analogies?"* • *A student explains an academic term to classmates.* • *The teacher pauses during an explanation of the civil rights movement to remind students that the prefix in- as in inequality means "not" and that the prefix un- also means the same thing.* • *A student says to a classmate, "I think that side of the triangle is called the hypotenuse."* • *And others…*

Component 3b:	Using Questioning and Discussion Techniques

Questioning and discussion are the only instructional strategies specifically referred to in the Framework for Teaching, a decision that reflects their central importance to teachers' practice. In the Framework, it is important that questioning and discussion be used as techniques to deepen student understanding rather than serve as recitation, or a verbal "quiz." Good teachers use divergent as well as convergent questions, framed in such a way that they invite students to formulate hypotheses, make connections, or challenge previously held views. Students' responses to questions are valued; effective teachers are especially adept at responding to and building on student responses and making use of their ideas. High-quality questions encourage students to make connections among concepts or events previously believed to be unrelated and to arrive at new understandings of complex material. Effective teachers also pose questions for which they do not know the answers. Even when a question has a limited number of correct responses, the question, being nonformulaic, is likely to promote student thinking.

Class discussions are animated, engaging all students in important issues and promoting the use of precise language to deepen and extend their understanding. These discussions may be based around questions formulated by the students themselves. Furthermore, when a teacher is building on student responses to questions (whether posed by the teacher or by other students), students are challenged to explain their thinking and to cite specific text or other evidence (for example, from a scientific experiment) to back up a position. This focus on argumentation forms the foundation of logical reasoning, a critical skill in all disciplines.

Not all questions must be at a high cognitive level in order for a teacher's performance to be rated at a high level; that is, when exploring a topic, a teacher might begin with a series of questions of low cognitive challenge to provide a review, or to ensure that everyone in the class is "on board." Furthermore, if questions are at a high level but only a few students participate in the discussion, the teacher's performance on the component cannot be judged to be at a high level. In addition, during lessons involving students in small-group work, the quality of the students' questions and discussion in their small groups may be considered as part of this component. In order for students to formulate high-level questions, they must have learned how to do so. Therefore, high-level questions from students, either in the full class or in small-group discussions, provide evidence that these skills have been taught.

The elements of component 3b are:

- Quality of questions/prompts
  Questions of high quality cause students to think and reflect, to deepen their understanding, and to test their ideas against those of their classmates. When teachers ask questions of high quality, they ask only a few of them and provide students with sufficient time to think about their responses, to reflect on the comments of their classmates, and to deepen their understanding. Occasionally, for the purposes of review, teachers ask students a series of (usually low-level) questions in a type of verbal quiz. This technique may be helpful for the purpose of establishing the facts of a historical event, for example, but should not be confused with the use of questioning to deepen students' understanding.
- Discussion techniques
  Effective teachers promote learning through discussion. A foundational skill that students learn through engaging in discussion is that of explaining and justifying their reasoning and conclusions, based on specific evidence. Teachers skilled in the use of questioning and discussion techniques challenge students to examine their premises, to build a logical argument, and to critique the arguments of others. Some teachers report, "We discussed x," when what they mean is "I said x." That is, some teachers confuse discussion with explanation of content; as important as that is, it's not discussion. Rather, in a true discussion a teacher poses a question and invites all students' views to be heard, enabling students to engage in discussion directly with one another, not always mediated by the teacher. Furthermore, in conducting discussions, skilled teachers build further questions on student responses and insist that students examine their premises, build a logical argument, and critique the arguments of others.
- Student participation
  In some classes a few students tend to dominate the discussion; other students, recognizing this pattern, hold back their contributions. The skilled teacher uses a range of techniques to encourage all students to contribute to the discussion and enlists the assistance of students to ensure this outcome.

Component 3b:	Using Questioning and Discussion Techniques
	Indicators include: • Questions of high cognitive challenge, formulated by both students and teacher • Questions with multiple correct answers or multiple approaches, even when there is a single correct response • Effective use of student responses and ideas • Discussion, with the teacher stepping out of the central, mediating role • Focus on the reasoning exhibited by students in discussion, both in give-and-take with the teacher and with their classmates • High levels of student participation in discussion

	Ineffective	Developing	Effective	Highly Effective
3b: Using Questioning and Discussion Techniques	The teacher's questions are of low cognitive challenge, with single correct responses, and are asked in rapid succession. Interaction between the teacher and students is predominantly recitation style, with the teacher mediating all questions and answers; the teacher accepts all contributions without asking students to explain their reasoning. Only a few students participate in the discussion.	The teacher's questions lead students through a single path of inquiry, with answers seemingly determined in advance. Alternatively, the teacher attempts to ask some questions designed to engage students in thinking, but only a few students are involved. The teacher attempts to engage all students in the discussion, to encourage them to respond to one another, and to explain their thinking, with uneven results.	While the teacher may use some low-level questions, he poses questions designed to promote student thinking and understanding. The teacher creates a genuine discussion among students, providing adequate time for students to respond and stepping aside when doing so is appropriate. The teacher challenges students to justify their thinking and successfully engages most students in the discussion, employing a range of strategies to ensure that most students are heard.	The teacher uses a variety or series of questions or prompts to challenge students cognitively, advance high-level thinking and discourse, and promote metacognition. Students formulate many questions, initiate topics, challenge one another's thinking, and make unsolicited contributions. Students themselves ensure that all voices are heard in the discussion.
Critical Attributes	• Questions are rapid-fire and convergent, with a single correct answer. • Questions do not invite student thinking. • All discussion is between the teacher and students; students are not invited to speak directly to one another. • The teacher does not ask students to explain their thinking. • Only a few students dominate the discussion.	• The teacher frames some questions designed to promote student thinking, but many have a single correct answer, and the teacher calls on students quickly. • The teacher invites students to respond directly to one another's ideas, but few students respond. • The teacher calls on many students, but only a small number actually participate in the discussion. • The teacher asks students to explain their reasoning, but only some students attempt to do so.	• The teacher uses open-ended questions, inviting students to think and/or offer multiple possible answers. • The teacher makes effective use of wait time. • Discussions enable students to talk to one another without ongoing mediation by teacher. • The teacher calls on most students, even those who don't initially volunteer. • Many students actively engage in the discussion. • The teacher asks students to justify their reasoning, and most attempt to do so.	• Students initiate higher-order questions. • The teacher builds on and uses student responses to questions in order to deepen student understanding. • Students extend the discussion, enriching it. • Students invite comments from their classmates during a discussion and challenge one another's thinking. • Virtually all students are engaged in the discussion.
Possible Examples	• *All questions are of the "recitation" type, such as "What is 3 x 4?"* • *The teacher asks a question for which the answer is on the board; students respond by reading it.* • *The teacher calls only on students who have their hands up.* • *A student responds to a question with wrong information, and the teacher doesn't follow up.* • *And others…*	• *Many questions are of the "recitation" type, such as "How many members of the House of Representatives are there?"* • *The teacher asks, "Who has an idea about this?" The usual three students offer comments.* • *The teacher asks, "Maria, can you comment on Ian's idea?" but Maria does not respond or makes a comment directly to the teacher.* • *The teacher asks a student to explain his reasoning for why 13 is a prime number but does not follow up when the student falters.* • *And others…*	• *The teacher asks, "What might have happened if the colonists had not prevailed in the American war for independence?"* • *The teacher uses the plural form in asking questions, such as "What are some things you think might contribute to _____?"* • *The teacher asks, "Maria, can you comment on Ian's idea?" and Maria responds directly to Ian.* • *The teacher poses a question, asking every student to write a brief response and then share it with a partner, before inviting a few to offer their ideas to the entire class.* • *The teacher asks students when they have formulated an answer to the question "Why do you think Huck Finn did _____?" to find the reason in the text and to explain their thinking to a neighbor.* • *And others…*	• *A student asks, "How many ways are there to get this answer?"* • *A student says to a classmate, "I don't think I agree with you on this, because…"* • *A student asks of other students, "Does anyone have another idea how we might figure this out?"* • *A student asks, "What if…?"* • *And others…*

Component 3c:	Engaging Students in Learning

Student engagement in learning is the centerpiece of the Framework for Teaching; all other components contribute to it. When students are engaged in learning, they are not merely "busy," nor are they only "on task." Rather, they are intellectually active in learning important and challenging content. The critical distinction between a classroom in which students are compliant and busy and one in which they are engaged is that in the latter, students are developing their understanding through what they do. That is, they are engaged in discussion, debate, answering "what if?" questions, discovering patterns, and the like. They may be selecting their work from a range of (teacher-arranged) choices, and making important contributions to the intellectual life of the class. Such activities don't typically consume an entire lesson, but they are essential components of engagement.

A lesson in which students are engaged usually has a discernible structure: a beginning, a middle, and an end, with scaffolding provided by the teacher or by the activities themselves. Student tasks are organized to provide cognitive challenge, and then students are encouraged to reflect on what they have done and what they have learned. That is, the lesson has closure, in which teachers encourage students to derive the important learning from the learning tasks, from the discussion, or from what they have read. Critical questions for an observer in determining the degree of student engagement are "What are the students being asked to do? Does the learning task involve thinking? Are students challenged to discern patterns or make predictions?" If the answer to these questions is that students are, for example, filling in blanks on a worksheet or performing a rote procedure, they are unlikely to be cognitively engaged.

In observing a lesson, it is essential not only to watch the teacher but also to pay close attention to the students and what they are doing. The best evidence for student engagement is what students are saying and doing as a consequence of what the teacher does, or has done, or has planned. And while students may be physically active (e.g., using manipulative materials in mathematics or making a map in social studies), it is not essential that they be involved in a hands-on manner; it is, however, essential that they be challenged to be "minds-on."

The elements of component 3c are:

- Activities and assignments
  The activities and assignments are the centerpiece of student engagement, since they determine what it is that students are asked to do. Activities and assignments that promote learning require student thinking that emphasizes depth over breadth and encourage students to explain their thinking.
- Grouping of students
  How students are grouped for instruction (whole class, small groups, pairs, individuals) is one of the many decisions teachers make every day. There are many options; students of similar background and skill may be clustered together, or the more-advanced students may be spread around into the different groups. Alternatively, a teacher might permit students to select their own groups, or they could be formed randomly.
- Instructional materials and resources
  The instructional materials a teacher selects to use in the classroom can have an enormous impact on students' experience. Though some teachers are obliged to use a school's or district's officially sanctioned materials, many teachers use these selectively or supplement them with others of their choosing that are better suited to engaging students in deep learning—for example, the use of primary source materials in social studies.
- Structure and pacing
  No one, whether an adult or a student, likes to be either bored or rushed in completing a task. Keeping things moving, within a well-defined structure, is one of the marks of an experienced teacher. And since much of student learning results from their reflection on what they have done, a well-designed lesson includes time for reflection and closure.

Component 3c:	Engaging Students in Learning
	Indicators include: • Student enthusiasm, interest, thinking, problem solving, etc. • Learning tasks that require high-level student thinking and invite students to explain their thinking • Students highly motivated to work on all tasks and persistent even when the tasks are challenging • Students actively "working," rather than watching while their teacher "works" • Suitable pacing of the lesson: neither dragged out nor rushed, with time for closure and student reflection

	Ineffective	Developing	Effective	Highly Effective
3c: Engaging Students in Learning	The learning tasks/activities, materials, and resources are poorly aligned with the instructional outcomes, or require only rote responses, with only one approach possible. The groupings of students are unsuitable to the activities. The lesson has no clearly defined structure, or the pace of the lesson is too slow or rushed.	The learning tasks and activities are partially aligned with the instructional outcomes but require only minimal thinking by students and little opportunity for them to explain their thinking, allowing most students to be passive or merely compliant. The groupings of students are moderately suitable to the activities. The lesson has a recognizable structure; however, the pacing of the lesson may not provide students the time needed to be intellectually engaged or may be so slow that many students have a considerable amount of "downtime."	The learning tasks and activities are fully aligned with the instructional outcomes and are designed to challenge student thinking, inviting students to make their thinking visible. This technique results in active intellectual engagement by most students with important and challenging content, and with teacher scaffolding to support that engagement. The groupings of students are suitable to the activities. The lesson has a clearly defined structure, and the pacing of the lesson is appropriate, providing most students the time needed to be intellectually engaged.	Virtually all students are intellectually engaged in challenging content through well-designed learning tasks and activities that require complex thinking by students. The teacher provides suitable scaffolding and challenges students to explain their thinking. There is evidence of some student initiation of inquiry and student contributions to the exploration of important content; students may serve as resources for one another. The lesson has a clearly defined structure, and the pacing of the lesson provides students the time needed not only to intellectually engage with and reflect upon their learning but also to consolidate their understanding.
Critical Attributes	• Few students are intellectually engaged in the lesson. • Learning tasks/activities and materials require only recall or have a single correct response or method. • Instructional materials used are unsuitable to the lesson and/or the students. • The lesson drags or is rushed. • Only one type of instructional group is used (whole group, small groups) when variety would promote more student engagement.	• Some students are intellectually engaged in the lesson. • Learning tasks are a mix of those requiring thinking and those requiring recall. • Student engagement with the content is largely passive; the learning consists primarily of facts or procedures. • The materials and resources are partially aligned to the lesson objectives. • Few of the materials and resources require student thinking or ask students to explain their thinking. • The pacing of the lesson is uneven—suitable in parts but rushed or dragging in others. • The instructional groupings used are partially appropriate to the activities.	• Most students are intellectually engaged in the lesson. • Most learning tasks have multiple correct responses or approaches and/or encourage higher-order thinking. • Students are invited to explain their thinking as part of completing tasks. • Materials and resources support the learning goals and require intellectual engagement, as appropriate. • The pacing of the lesson provides students the time needed to be intellectually engaged. • The teacher uses groupings that are suitable to the lesson activities.	• Virtually all students are intellectually engaged in the lesson. • Lesson activities require high-level student thinking and explanations of their thinking. • Students take initiative to improve the lesson by (1) modifying a learning task to make it more meaningful or relevant to their needs, (2) suggesting modifications to the grouping patterns used, and/or (3) suggesting modifications or additions to the materials being used. • Students have an opportunity for reflection and closure on the lesson to consolidate their understanding.
Possible Examples	• *Most students disregard the assignment given by the teacher; it appears to be much too difficult for them.* • *Students fill out the lesson worksheet by copying words from the board.* • *Students are using math*	• *Students in only three of the five small groups are figuring out an answer to the assigned problem; the others seem to be unsure how they should proceed.* • *Students are asked to fill in a worksheet, following an established procedure.*	• *Five students (out of 27) have finished an assignment early and begin talking among themselves; the teacher assigns a follow-up activity.* • *Students are asked to formulate a hypothesis about what might happen if the American voting system allowed for the direct election of presidents*	• *Students are asked to write an essay in the style of Hemingway and to describe which aspects of his style they have incorporated.* • *Students determine which of several tools—e.g., a protractor, spreadsheet, or*

	Ineffective	Developing	Effective	Highly Effective
	manipulative materials in a rote activity. • *The teacher lectures for 45 minutes.* • *Most students don't have time to complete the assignment; the teacher moves on in the lesson.* • *And others…*	• *There is a recognizable beginning, middle, and end to the lesson.* • *The teacher lectures for 20 minutes and provides 15 minutes for the students to write an essay; not all students are able to complete it.* • *And others…*	*and to explain their reasoning.* • *Students are given a task to do independently, then to discuss with a table group, followed by a reporting from each table.* • *Students are asked to create different representations of a large number using a variety of manipulative materials.* • *The lesson is neither rushed nor does it drag.* • *And others…*	*graphing calculator—would be most suitable to solve a math problem.* • *A student asks whether they might remain in their small groups to complete another section of the activity, rather than work independently.* • *Students identify or create their own learning materials.* • *Students summarize their learning from the lesson.* • *And others…*

Component 3d:	Using Assessment in Instruction

Assessment of student learning plays an important new role in teaching: no longer signaling the *end* of instruction, it is now recognized to be an integral *part* of instruction. While assessment *of* learning has always been and will continue to be an important aspect of teaching (it's important for teachers to know whether students have learned what teachers intend), assessment *for* learning has increasingly come to play an important role in classroom practice. And in order to assess student learning for the purposes of instruction, teachers must have a "finger on the pulse" of a lesson, monitoring student understanding and, where feedback is appropriate, offering it to students.

A teacher's actions in monitoring student learning, while they may superficially look the same as those used in monitoring student behavior, have a fundamentally different purpose. When monitoring behavior, teachers are alert to students who may be passing notes or bothering their neighbors; when monitoring student learning, teachers look carefully at what students are writing, or listen carefully to the questions students ask, in order to gauge whether they require additional activity or explanation to grasp the content. In each case, the teacher may be circulating in the room, but his or her purpose in doing so is quite different in the two situations.

Similarly, on the surface, questions asked of students for the purpose of monitoring learning are fundamentally different from those used to build understanding; in the former, the questions seek to reveal students' misconceptions, whereas in the latter the questions are designed to explore relationships or deepen understanding. Indeed, for the purpose of monitoring, many teachers create questions specifically to elicit the extent of student understanding and use additional techniques (such as exit tickets) to determine the degree of understanding of every student in the class. Teachers at high levels of performance in this component, then, demonstrate the ability to encourage students and actually teach them the necessary skills of monitoring their own learning against clear standards.

But as important as monitoring student learning and providing feedback to students are, however, they are greatly strengthened by a teacher's skill in making mid-course corrections when needed, seizing on a "teachable moment," or enlisting students' particular interests to enrich an explanation.

The elements of component 3d are:

- Assessment criteria
  It is essential that students know the criteria for assessment. At its highest level, students themselves have had a hand in articulating the criteria (for example, of a clear oral presentation).
- Monitoring of student learning
  A teacher's skill in eliciting evidence of student understanding is one of the true marks of expertise. This is not a hit-or-miss effort, but is planned carefully in advance. Even after planning carefully, however, a teacher must weave monitoring of student learning seamlessly into the lesson, using a variety of techniques.
- Feedback to students
  Feedback on learning is an essential element of a rich instructional environment; without it, students are constantly guessing at how they are doing and at how their work can be improved. Valuable feedback must be timely, constructive, and substantive and must provide students the guidance they need to improve their performance.
- Student self-assessment and monitoring of progress
  The culmination of students' assumption of responsibility for their learning is when they monitor their own learning and take appropriate action. Of course, they can do these things only if the criteria for learning are clear and if they have been taught the skills of checking their work against clear criteria.

Indicators include:

- The teacher paying close attention to evidence of student understanding
- The teacher posing specifically created questions to elicit evidence of student understanding
- The teacher circulating to monitor student learning and to offer feedback
- Students assessing their own work against established criteria

	Ineffective	Developing	Effective	Highly Effective
3d: Using Assessment in Instruction	Students do not appear to be aware of the assessment criteria, and there is little or no monitoring of student learning; feedback is absent or of poor quality. Students do not engage in self- or peer assessment.	Students appear to be only partially aware of the assessment criteria, and the teacher monitors student learning for the class as a whole. Questions and assessments are rarely used to diagnose evidence of learning. Feedback to students is general, and few students assess their own work.	Students appear to be aware of the assessment criteria, and the teacher monitors student learning for groups of students. Questions and assessments are regularly used to diagnose evidence of learning. Teacher feedback to groups of students is accurate and specific; some students engage in self-assessment.	Assessment is fully integrated into instruction, through extensive use of formative assessment. Students appear to be aware of, and there is some evidence that they have contributed to, the assessment criteria. Questions and assessments are used regularly to diagnose evidence of learning by individual students. A variety of forms of feedback, from both teacher and peers, is accurate and specific and advances learning. Students self-assess and monitor their own progress. The teacher successfully differentiates instruction to address individual students' misunderstandings.
Critical Attributes	• The teacher gives no indication of what high-quality work looks like. • The teacher makes no effort to determine whether students understand the lesson. • Students receive no feedback, or feedback is global or directed to only one student. • The teacher does not ask students to evaluate their own or classmates' work.	• There is little evidence that the students understand how their work will be evaluated. • The teacher monitors understanding through a single method, or without eliciting evidence of understanding from students. • Feedback to students is vague and not oriented toward future improvement of work. • The teacher makes only minor attempts to engage students in self- or peer assessment.	• The teacher makes the standards of high-quality work clear to students. • The teacher elicits evidence of student understanding. • Students are invited to assess their own work and make improvements; most of them do so. • Feedback includes specific and timely guidance, at least for groups of students.	• Students indicate that they clearly understand the characteristics of high-quality work, and there is evidence that students have helped establish the evaluation criteria. • The teacher is constantly "taking the pulse" of the class; monitoring of student understanding is sophisticated and continuous and makes use of strategies to elicit information about individual student understanding. • Students monitor their own understanding, either on their own initiative or as a result of tasks set by the teacher. • High-quality feedback comes from many sources, including students; it is specific and focused on improvement.
Possible Examples	• *A student asks, "How is this assignment going to be graded?"* • *A student asks, "Is this the right way to solve this problem?" but receives no information from the teacher.* • *The teacher forges ahead with a presentation without checking for understanding.* • *After the students present their research on globalization, the teacher tells them their letter grade; when*	• *The teacher asks, "Does anyone have a question?"* • *When a student completes a problem on the board, the teacher corrects the student's work without explaining why.* • *The teacher says, "Good job, everyone."* • *The teacher, after receiving a correct response from one student, continues without*	• *The teacher circulates during small-group or independent work, offering suggestions to students.* • *The teacher uses specifically formulated questions to elicit evidence of student understanding.* • *The teacher asks students to look over their papers to correct their errors; most of them engage in this task.* • *And others…*	• *The teacher reminds students of the characteristics of high-quality work, observing that the students themselves helped develop them.* • *While students are working, the teacher circulates, providing specific feedback to individual students.* • *The teacher uses popsicle sticks or exit tickets to elicit evidence of individual student understanding.*

	Ineffective	Developing	Effective	Highly Effective
	students ask how he arrived at the grade, the teacher responds, "After all these years in education, I just know what grade to give." • *And others…*	*ascertaining whether other students understand the concept.* • *The students receive their tests back; each one is simply marked with a letter grade at the top.* • *And others…*		• *Students offer feedback to their classmates on their work.* • *Students evaluate a piece of their writing against the writing rubric and confer with the teacher about how it could be improved.* • *And others…*

Component 3e:	Demonstrating Flexibility and Responsiveness

"Flexibility and responsiveness" refer to a teacher's skill in making adjustments in a lesson to respond to changing conditions. When a lesson is well planned, there may be no need for changes during the course of the lesson itself. Shifting the approach in midstream is not always necessary; in fact, with experience comes skill in accurately predicting how a lesson will go and being prepared for different possible scenarios. But even the most skilled, and best prepared, teachers will occasionally find either that a lesson is not proceeding as they would like or that a teachable moment has presented itself. They are ready for such situations. Furthermore, teachers who are committed to the learning of all students persist in their attempts to engage them in learning, even when confronted with initial setbacks.

The elements of component 3e are:

- Lesson adjustment
  Experienced teachers are able to make both minor and (at times) major adjustments to a lesson, or mid-course corrections. Such adjustments depend on a teacher's store of alternate instructional strategies and the confidence to make a shift when needed.
- Response to students
  Occasionally during a lesson, an unexpected event will occur that presents a true teachable moment. It is a mark of considerable teacher skill to be able to capitalize on such opportunities.
- Persistence
  Committed teachers don't give up easily; when students encounter difficulty in learning (which all do at some point), these teachers seek alternate approaches to help their students be successful. In these efforts, teachers display a keen sense of efficacy.

Indicators include:

- Incorporation of students' interests and daily events into a lesson

- The teacher adjusting instruction in response to evidence of student understanding (or lack of it)
- The teacher seizing on a teachable moment

	Ineffective	Developing	Effective	Highly Effective
3e: Demonstrating Flexibility and Responsiveness	The teacher ignores students' questions; when students have difficulty learning, the teacher blames them or their home environment for their lack of success. The teacher makes no attempt to adjust the lesson even when students don't understand the content.	The teacher accepts responsibility for the success of all students but has only a limited repertoire of strategies to use. Adjustment of the lesson in response to assessment is minimal or ineffective.	The teacher successfully accommodates students' questions and interests. Drawing on a broad repertoire of strategies, the teacher persists in seeking approaches for students who have difficulty learning. If impromptu measures are needed, the teacher makes a minor adjustment to the lesson and does so smoothly.	The teacher seizes an opportunity to enhance learning, building on a spontaneous event or students' interests, or successfully adjusts and differentiates instruction to address individual student misunderstandings. Using an extensive repertoire of instructional strategies and soliciting additional resources from the school or community, the teacher persists in seeking effective approaches for students who need help.
Critical Attributes	• The teacher ignores indications of student boredom or lack of understanding. • The teacher brushes aside students' questions. • The teacher conveys to students that when they have difficulty learning, it is their fault. • In reflecting on practice, the teacher does not indicate that it is important to reach all students. • The teacher makes no attempt to adjust the lesson in response to student confusion.	• The teacher makes perfunctory attempts to incorporate students' questions and interests into the lesson. • The teacher conveys to students a level of responsibility for their learning but also his uncertainty about how to assist them. • In reflecting on practice, the teacher indicates the desire to reach all students but does not suggest strategies for doing so. • The teacher's attempts to adjust the lesson are partially successful.	• The teacher incorporates students' interests and questions into the heart of the lesson. • The teacher conveys to students that she has other approaches to try when the students experience difficulty. • In reflecting on practice, the teacher cites multiple approaches undertaken to reach students having difficulty. • When improvising becomes necessary, the teacher makes adjustments to the lesson.	• The teacher seizes on a teachable moment to enhance a lesson. • The teacher conveys to students that she won't consider a lesson "finished" until every student understands and that she has a broad range of approaches to use. • In reflecting on practice, the teacher can cite others in the school and beyond whom he has contacted for assistance in reaching some students. • The teacher's adjustments to the lesson, when they are needed, are designed to assist individual students.
Possible Examples	• *The teacher says, "We don't have time for that today."* • *The teacher says, "If you'd just pay attention, you could understand this."* • *When a student asks the teacher to explain a mathematical procedure again, the teacher says, "Just do the homework assignment; you'll get it then."* • *And others…*	• *The teacher says, "I'll try to think of another way to come at this and get back to you."* • *The teacher says, "I realize not everyone understands this, but we can't spend any more time on it."* • *The teacher rearranges the way the students are grouped in an attempt to help students understand the lesson; the strategy is partially successful.* • *And others…*	• *The teacher says, "That's an interesting idea; let's see how it fits."* • *The teacher illustrates a principle of good writing to a student, using his interest in basketball as context.* • *The teacher says, "This seems to be more difficult for you than I expected; let's try this way," and then uses another approach.* • *And others…*	• *The teacher stops a lesson midstream and says, "This activity doesn't seem to be working. Here's another way I'd like you to try it."* • *The teacher incorporates the school's upcoming championship game into an explanation of averages.* • *The teacher says, "If we have to come back to this tomorrow, we will; it's really important that you understand it."* • *And others…*