



Formative Assessment for ERWC 3.0

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From the moment a module is launched in a classroom, we begin to get information from our students about how they are responding to and progressing with their learning. That informal flow of information constitutes a rich resource for us to determine what next steps we could take to move closer to the learning goals we have identified for teaching. It can help us close the gaps between what students are striving to learn and where they currently are.

In today's ERWC classrooms, monitoring our students' progress in understanding concepts and processes we are teaching presents a profound challenge to each of us. While many students flourish in our classrooms, some experience frustrations with learning, and their struggles are often hidden. However, approaches that enable us to see teaching and learning cycles more clearly and adjust instruction to advance learning are available. Formative assessment, as a short-term evaluative process with a range of benefits to teachers and students, can help us overcome many challenges, such as students' limited comprehension or misunderstandings. These challenges can impede the progress of learning and, when identified and surmounted, can accelerate students' achievement.

Over the past few years, educators (Heritage; Linquanti) have made significant strides toward expanding our knowledge and use of formative assessment. We now acknowledge that formative assessment operates as an extension of the teaching and learning cycle. It provides us with critically important information about our students' learning and our approaches to teaching. Its application enables us to see more clearly the achievements of our students as well as the actual, authentic stumbling blocks to mastery of strategies and knowledge that are often hidden from view. Using the formative assessment process with its focus on evaluation *for* learning rather than the assessment *of* learning, we can clarify these impediments and remove or overcome them. With this focus on evaluation *for* student learning, formative assessment functions as a process of inquiry and investigation with the intention of discovering a path to action on multiple levels in our classrooms.

Key Features of Formative Assessment

Our understanding and effective implementation of formative assessment are of fundamental importance to student learning and achievement in our ERWC classrooms. Formative assessment is not a set of testing items or a singular event that ranks our students' performance. It's a short-cycle process that occurs repeatedly during our instruction to provide feedback to adjust our teaching and augment students' learning (California Department of Education). In striving to personalize the learning of each of our students and to enable them to become better learners, we need to understand that formative assessment entails a network of interconnected elements. The appearance of those elements in our classrooms is necessary if the approach is likely to work for us and our students (Linquanti). To increase the possibility of formative assessment working well, we need to attend to the following elements:

- Clear learning goals or outcomes to guide our instruction;
- The application of criteria that signal progress toward those learning goals;
- Procedures to generate evidence about our students' learning that we can gather efficiently;
- Approaches we can use to interpret that evidence insightfully;
- Pedagogical actions and strategies, such as effective feedback to students, that are responsive to the evidence we gather and interpret; and
- Methods to foster our students' engagement in this assessment process throughout the learning cycles we initiate.

To bring these foundational elements to life in our classrooms, we can strive to cultivate communities of learners growing at the edges of their capacity. These edges emerge from students' stages of development as learners. However, those stages vary widely in each classroom. While some students' level of reading development enables them to comprehend even challenging texts, such as Orwell's 1984 and Brave New World, with frustrations they can surmount, other students may find the same text requires an enormous amount of teacher scaffolding and support to make the language accessible. Each of our students has his or her personal Zone of Proximal Development (ZPD), a construct hypothesized and operationalized by the Russian psychologist, Lev Vygotsky. The ZPD serves as a reminder that teaching at these edges is where we, as engaged teachers, should be teaching. As Vygotsky put it, our intentions to teach should target not the function of students that is already mature on the tree of knowledge but the function that is ripening. In the case of writing arguments, for example, some students reveal considerable maturity in their ability to draft a text that addresses many aspects of an effective argumentative essay while other students, showing only the seeds of potential development, struggle with basic concepts, such as an essay's purpose or a paragraph's structure.

Vygotsky observed that learning takes place not on one but two levels. The first level is within the community, or between minds, between student and teacher or between student and another more knowledgeable peer. The second level of learning occurs internally, or within the individual learner's mind. The first level has to occur for the second to exist independent of other people. For example, our students, who may never have heard of the concept of metacognition, learn about it on the first level when we explain in the classroom community of interacting minds what metacognition is, how it works, and how our understanding of it helps us become better readers, writers, and learners. We may then carry out an exercise that demonstrates learning at the second level, within the individual learner's mind. At this second level, a student who has internalized the concept of metacognition identifies and describes metacognitive strategies he or she uses independently to read challenging texts or to write rhetorically effective compositions. For those students who have not internalized concepts we have taught, who have not gone to the second level, such as understanding the meaning of pathos and how to describes its effects in a text, we may have to go back to the first level. However, as a result of the successful completion of that cycle of teaching and learning, students move further in the development of knowledge and skills within classroom communities.

It Takes a Community

Formative assessment, if it's to have a promising likelihood of success, requires a context of community where learning, meaning, and identity are fostered (Wenger). Attaining that context of community rarely arises without considerable work, including establishing classroom norms that entail respect for each learner, an appreciation for the discovery of meaning, and an ongoing pursuit of each student's self-discovery. That community, guided and unified by the shared pursuit of common learning goals, is founded in procedures with which students become familiar. These communities, which take ingenuity and commitment to create, are at the foundation of efforts to implement formative assessment. In these communities, each student's capacities for learning are unique. Each student brings a distinctive network of talents. Each student has his/her own edges or thresholds for learning that teachers and other students in the class will need to discover to move toward maturity. In our classroom communities, all students should be encouraged to identify the edges of their knowledge and skills while being urged toward further growth.

On the way to developing classroom communities for formative assessment, a journey that is unlikely to be without its long upward climbs and troubling descents, we need to entertain a number of understandings.

- First, formative assessment is a process of inquiry and action that is part of our daily routine of teaching and that involves the active participation of our students.
- Second, our physical classroom should be organized to facilitate activities, such as group discussion, interaction between small groups of students, and opportunities for us as teachers to observe closely students' collaboration.
- Third, we need to establish a community of interactions in which we strive to structure opportunities for teacher-to-student(s) and student-to-student(s) conversations over substantial topics and texts.
- Fourth, in our classrooms our observations, tasks, and interactions provide opportunities for insights to assess our students' progress.
- Fifth, perseverance will be required to discover students' acquired knowledge and to interpret information with insight to help them grow and mature at the edges of their development.
- Sixth, students are to acquire agency in the classroom and to participate actively in the process of assessing their progress and that of their classmates.
- Seventh, and last, a collaborative relationship not only between ourselves and our students but also
 between one student and another is essential for the development of a community where formative
 assessment works.

Community Procedures to Prepare for Formative Assessment

Identifying learning goals. Implementing formative assessment in ERWC classrooms entails some planning before teaching. Teachers need time to distill learning goals and identify criteria for success on the way to achieving those goals. This planning entails our reviewing a module, analyzing its components, and acquiring an understanding of its content. During the review, we can identify knowledge, skills, and strategies it contains. For example, when reviewing a module based on a book, such as The Things They Carried, what information do all students need to know and master? What skills do readers of and writers about this book need to acquire that will contribute to their developing into better readers and writers? And what strategies as learners can be transferred to this book from other modules to deepen students' comprehension or the quality of an essay they write about the things they carry in their lives? To help teachers in the process of identifying learning goals for a module, module creators have been asked to design their modules with learning goals they identify for their module in mind. While those stated learning goals make the module designer's intentions evident, you may have additional learning goals for a specific module. Individual activities within modules may also have learning goals as well that help guide our approach to their implementation. Clarity of expected outcomes, discussed with students as a module begins, has been found to contribute to students' success in learning (Clarke).

If you are in the midst of teaching a module and discover that you are encountering instructional issues with some aspect of that module's implementation unrelated to any learning goal stated by the module's creator or by you, the opportunity has probably arisen for you to intervene with formative assessments of your own unrelated to existing learning goals. In such instances, it will be quite likely that some learning goal is operating beneath the surface of the instructional issue that has arisen and that you will soon formulate a goal that will inform the formative assessment process. For example, students may begin to have problems with vocabulary or specialized terminology that calls for special attention. In that case, the emerging learning goal will have something important to say about the mastery of language required for students to comprehend texts in the module and to write about them. The formative assessment activity you decide to use when an instructional issue arises may not require more than your close observation of students' behaviors. However, to facilitate your investigation of students' problems and progress with learning, you may want to draw upon the bank of formative assessment strategies provided in Appendix A: Strategies for Formative Assessment.

We also hope to encourage students to identify and articulate their own personal learning goals. Students' individual progress as readers and writers should inform these personal goals. There is no way that we can encompass the range of individual learning goals that students may generate for themselves. However, we can, where possible, help them to discover what these goals may be. We can then support students in the pursuit of those goals when opportunities arise. Class-wide learning goals for our modules that have been created by the module's designers along with personal student learning goals can serve as beacons. Those beacons guide our students' progress in learning and facilitate formative assessment.

Developing success criteria. Success criteria are indicators. They tell us what to look for in terms of student behavior or performance that shows the extent of a student's progress toward a learning goal. They are a gauge of learning. These success criteria are best developed or identified before teaching begins. With those criteria articulated, we will have in mind the kinds of evidence we will be looking for as signs of progress. If we articulate those criteria in clear language and provide examples of what does and what does not signal success, our students will understand and apply success criteria more effectively themselves. If you are teaching a module for the first time, it will be to your advantage—and to the benefit of your students—if you can review the module's learning goals as well as those you may add in the light of the module's text(s) and array of activities. You can ask yourself about each activity, "What indicators of success are likely to be generated by this activity and how can I use that data to evaluate my students' progress toward mastery of a relevant learning goal?" If you are re-teaching a module, you will have history on your side. Information about what formative assessment events have helped you in the past and what success criteria became evident are likely to reoccur and help you evaluate progress in the future. With success criteria on hand, we will have a clearer conception and vision of the behaviors in our students that will help us know how well they understand a new concept, skill, or strategy. Although various pre-designed module activities can contribute to the gathering of evidence that serve as signs of progress, your observations and the conversations that occur minute-by-minute in our classrooms also contribute evidence.

Formative assessment evidence we gather needs to be aligned with learning goals and success criteria related to those goals. If a teacher has made it clear to students that one of the learning goals for a module is to understand and identify the presence and influence of ethos in an argumentative text, success criteria will be needed to indicate progress toward that goal. Evidence that students have identified language in an argumentative text that conveys information about its author's character and credibility and its effects on the argument's presentation provides an example of success criteria. Data that serves as evidence could be generated by asking students to complete a strategy called SOAPStone, an acronym for a series of questions about a text's Speaker, Occasion, Audience, Purpose, Subject, and Tone. Evidence of progress toward the attainment of the learning goal related to ethos would appear in students' responses to the question, Who is the Speaker? That evidence would be students' description of attributes of the author manifested in the text that influence the meaning and persuasiveness of the text. If students, or some subgroup of them, are unable to answer successfully that question about the Speaker, that evidence signals a need to return to the concept of ethos and to find alternative methods to teach it and its appearance.

Evidence generated through formative assessment activities should enable us to make instructional decisions that we can enact to help our students progress (Heritage, *Formative Assessment in Practice*). For example, if one of the learning goals for a module was that all students would be able to successfully complete the Annotating and Questioning the Text process, teachers could consider the criteria for success they would hope to see in their students' work as their students progress. They would also consider the kinds of formative assessment strategies needed to generate that evidence of progress. Table 1 provides a potential vision for the realization of such a plan, including success criteria and formative assessment strategies.

Table 1. Identifying Success Criteria and Strategies to Generate Relevant Evidence of Progress Toward the Learning Goal of Mastering Annotating and Questioning the Text

Success Criteria: Am I able to	Formative Assessment Strategies		
Identify thesis and/or major claims?	Observe notations on student's copy of text to confirm thesis has been identified in left margin or double underlined.		
Identify evidence supporting thesis and/or major claims?	Observe notations on student's copy of text to confirm evidence has been noted in left margin or with single underline.		
Identify introduction, issue or problem, main argument, conclusion?	 Questions answered in class: Where does introduction end? What is the main issue? What is author's argument? Where does the conclusion begin? 		
Fill in right margin with questions, disagreements, elaboration, moments of confusion?	Ask students to pair up, share information students have written in right margin, and report to whole class. Examples go up for whole class to monitor and examine.		

Planning for formative assessment activities. Developers of ERWC modules have been encouraged to design and include formative assessment activities at critical points in their modules. These activities are designed to generate data related to the learning goals articulated for the module. Reviewing and analyzing each module before teaching it should inform you of build-in formative assessment activities and enable you to understand the relationship between those activities and particular goals of a module. However, during the pre-teaching review of a module, you can begin to envision at what points in the module you could introduce formative assessments of your own making. These class-specific formative assessments could be tailored to the unique profile of students in your class. They can address the challenges you know and understand your students face as learners.

Community Strategies for Formative Assessment While Teaching

We know that our students spontaneously generate streams of information for us about how they are responding to a new module from the moment we begin to present it, and we can use those streams of informal information to make decisions about how to progress toward a module's learning goals. However, other practices and processes are available that we can use to generate information to help us and our students monitor and assess their progress. These include inquiry-oriented instruction, classroom conversation, questioning, and student portfolios.

Inquiry oriented instruction. As texts and issues are introduced and explored in our ERWC classrooms, inquiry should be a hallmark of our teaching. Much has been done in each module to facilitate students' access to a text's message and meaning. Modules reflect an underlying assignment template designed to guide instruction and learning toward inquiry and discovery. Questions such as these shape our ERWC teaching: What does this text say? How does the text convey its message? How can the text's rhetorical situation be more effectively described? What can we learn about the issue upon which the texts are focused and from the various voices that have contributed to its exploration? But to foster a classroom for

inquiry, we need to foster classrooms open to conversations that enable teachers and students to pursue investigation and interrogation.

Classroom conversation. Dialogue between our students and ourselves as well as among students is of fundamental relevance to inquiry. That dialogue fosters our students' understandings and perceptions. It's impossible to overestimate the importance of conversation in our classrooms for the purposes of learning and discovering what needs to be learned next. With it, we can progress toward the learning goals we've developed and clarified with our students. Classroom conversations allow inquiring minds to engage in discovery. While those conversations can be easily interrupted, sidelined, or squelched, some key principles that we can apply contribute to successful classroom talk.

Jim Knight has provided us with a set of beliefs about conversations that, if understood and practiced, could provide essential support for good dialogue. Effective communication between teachers and their students or among students is an essential ingredient for learning and the development of expert learners. However, the steps to building good conversations in classrooms can be steep. According to Knight, what stands at the center of effective conversations are partnerships. To foster those partnerships, Knight proposes his beliefs about creating better conversations:

- 1. He sees conversation partners as equals.
- 2. He wants to hear what others have to say.
- 3. He believes people should have a lot of autonomy.
- 4. He doesn't judge others.
- 5. Conversation should be back and forth.
- 6. Conversations should be life-giving (by which he means they should be energizing, affirming, and productive).

Knight accompanies his beliefs with a network of conversational habits that could be modeled in our classrooms to promote formative assessment. By modeling those habits, more engaging dialogue might occur between ourselves and our students and among students themselves. From his network of habits, one is of particular relevance to our classrooms and our pursuit of information to interpret and act upon as we teach. Knight advises listening with empathy. He explains that, when we see the world through others' eyes and feel the world through the hearts of others, we demonstrate empathy. To listen empathically, he advises us to "commit to really listen," to pause and consider what we want to say before saying anything, and to refrain from interrupting. If we can help students to listen more carefully, more thoughtfully, more empathically to each other as they discuss issues relevant to themselves—issues that may be emotionally charged, we can foster more engaged classrooms. Students' progress in learning will become more transparent, and they can offer us more information about what needs to be learned and mastered next.

Questioning. Questioning in the context of formative assessment provides a broad horizon of opportunities for us to gather information about our students' learning. It can also help students assess their progress as learners. Quite often we are inclined to pose questions to our students who then raise their hands to be called upon. And quite often those raising their hands tend to be repeaters, students whose hands are often signaling their readiness to participate. Some students in classrooms managed this way will never raise their hands. Once in a while, we may call on the quiet ones. Perhaps a more promising path for drawing more students into participation would be to have no-hands episodes. During

those episodes, we pull a name from a class set of tongue depressors with each student's name on it. We can strive to have every student participate during a class session so that all will contribute something.

That no-hands procedure changes the information that we acquire about what our students know and about who knows it. To promote classroom collaboration, we can also form talking-pairs by which, after a question is posed, two students team up for a minute to determine the answer. Then one of the two can report to the class as a whole. If someone's partner had a particular good point to make, then he or she could share that contribution with the class as a whole (Clarke).

Questioning that we begin early in a class session might be more focused on discovering what our students' understandings and beliefs are before presenting our own perspectives. By presenting students with evidence and perspectives that might contradict or challenge their positions, we as teachers can engender discussion when questioning initial hypotheses. Through our initial questioning, we can deepen student engagement and discover the ripening edges of their learning in their zones of proximal development.

Helping students learn to ask questions can contribute to their becoming more independent, persistent, and responsible learners. Getting them to ask questions in class can be fostered by providing time to develop questions that reflect their curiosity. We can give students a few minutes to write out a question they have about their reading for the day or another relevant issue on a 3x5 card. The questions themselves provide data for formative assessing. However, these questions can be drawn randomly from a pile or reviewed before presentation to the class as a whole. With these student-generated questions, a nohands or talking-pairs procedure can be used to gather answers that provide data to assess our students' progress.

Student portfolios. To engage effectively in monitoring their progress in learning and what next steps would serve its development, students should have access to work they have done throughout the course. That accessible work could include not only essays but also quickwrites, annotated texts, and summaries. Procedures for keeping portfolios of students' work ought to be established early in the course and periodically revisited. Some ERWC teachers have discovered that keeping a matrix of module writing assignments, scores or comments on them, notations about strengths or areas to improve, and goals for next writing assignments have facilitated portfolio maintenance. Maintaining the portfolio and an accompanying matrix of assignments also promotes student-regulated development.

A suggested format is provided in Table 2. ERWC: Where I Am and Where I'm Going. Students can use it to monitor their performance, including their strengths and areas to improve, and chart their next steps to progress as writers. These and other elements of productive feedback are explored in more depth in the "Feedback Matters" section of this document.

Table 2. ERWC: Where I Am and Where I'm Going

Directions: In order to keep track of our progress over the course of the year, fill in the chart below after the writing assignments for each module are returned. Use rubric markings and/or teacher comments and peer-response comments to assist you with this task.

Module Title and Writing Assignment (for example, essay, summary, quickwrite, etc.)	Rubric Score and/or Teacher Comments	Strengths (using language from the Rubric, teacher's comments, peer-response comments, or your own perceptions)	Areas to Improve (using language from the rubric, teacher's comments, peer-re- sponse comments, or your own perceptions)	Where I'm Going: Goals for My Next Writing Assignment (using language from the rubric)

Pre-designed strategies for formative assessment (Appendix A). Pre-designed formative assessment strategies that teachers can use in a more predictable format, such as student portfolios and activities built into ERWC modules, generate information that enables us to examine how students are progressing and what may need further teaching. Observation and analysis of student learning behaviors "on the fly" also produce formative assessment information related to mastery of concepts and procedures. In addition, an extensive set of micro-strategies for formative assessment activities is provided in Appendix A as a resource. Teachers can draw upon them at appropriate moments during classroom instruction. These micro-strategies include no-point quizzes, one sentence summaries of instructional episodes on key concepts or strategies, fuzzy/clear index cards that indicate what parts of a lesson may require further teaching, and student-generated questions to facilitate review of material covered in class before a test is given or a paper is due.

Stages in Formative Assessment

Formative assessment typically progresses in stages. To reduce the gap between where students are and where we would like our students to be, there are normally three specific steps: 1) information is gathered about student performance; 2) information is interpreted to discover the best ways to understand or gain insights into students' needs for learning; and 3) instructional actions are taken based on the evidence we gathered and interpreted. Once we have moved through these instructional stages, we should be able to answer for ourselves several key questions about how our teaching of an ERWC module is progressing (California Department of Education):

- Where are my students in relation to the learning goals I have for this module or activity?
- What are the gaps between my students' current knowledge and the learning goals? (With respect to these gaps, recall Vygotsky's ZPD and the edges of student knowledge.)
- What individual difficulties in reaching our learning goals are some of my students experiencing?
- What do I need to provide for them to advance and close the gap between what they know now about a learning goal and their mastery of it?

Having answers to these questions at any moment in a cycle of teaching and learning enables us to make well-informed decisions about instructional actions relevant to an individual student, a group of students, or an entire classroom. However, for those teachers who have English learners (EL) in their classrooms, it's important to keep in mind that an EL student may have an understanding of a learning goal that could be expressed in that student's native language but not be able to express that understanding sufficiently in English for us to be assured that the goal has been met. In such instances, asking students to write their understanding in their native language and in English could provide an opportunity to discover an EL student's proximity to meeting the learning goal for the class.

Feedback Matters

Researchers have discovered several important facts about the impact of formative assessment, such as the impact of feedback, that can inform our understanding of the formative assessment process and our approaches to its optimum use. Hattie and Timperley reviewed and identified the conditions under which feedback had the most positive impact on learning. To be effective, formative assessment feedback must answer three key questions.

- 1. Where am I going (Feed Up)?
- 2. How am I going (Feed Back)?
- 3. Where to next (Feed Forward)?

We have seen these key questions reflected earlier in a matrix ("ERWC: Where I Am and Where I'm Going") for use by students in the maintenance and monitoring of their portfolios.

Where am I going? Knowledge about goals and purposes is critical to student learning. When students do not clearly understand goals teachers expect them to achieve, students have difficulty knowing what they have to accomplish or what will be considered successful learning. On the other hand, if students grasp the type and level of performance they are expected to attain, they can more successfully monitor and guide their efforts. If goals are unclear to students, feedback is far less likely to contribute to changes in students' performance. In the context of ERWC, if students fail to see that an important learning goal

for them is to understand how an author uses an emotional appeal to persuade an audience, then a teacher's feedback to students about their overlooking the use of loaded language in an article on racial profiling is unlikely to have much impact or contribute to change in student learning. Without a clear understanding of where they are going, students have trouble getting there.

How am I going? In providing feedback to students that answers this question, teachers enable their students to get a clearer picture of the gap between what they are expected to achieve and what they have accomplished so far. The expected level of achievement may be related to a learning goal in the form of a standard (e.g., "integrate information into the text selectively to maintain the flow of ideas") or to the degree to which a student has mastered a specific sub-task—like the ability to quote, paraphrase, or summarize accurately. Getting feedback will inform students about how they are progressing or how their progress could be improved. When ERWC students ask how they are doing and teachers provide information about students' progress toward Common Core State Standards or about a sub-task, such as making defensible assertions about a writer's argument or their need to distinguish between facts and opinions as sources of evidence, then teachers are giving feedback that is likely to help students understand where they are and where they need to go next. For example, in the module Juvenile Justice, an activity focused on Reading for Understanding serves as a formative assessment of students' ability to summarize what a writer is saying and analyze the rhetorical purposes of a text. Teacher feedback can help those students who have problems with precision become more precise in their summaries and analysis.

Where to next? With feedback that clarifies learning goals (Where am I going?) and feedback that clarifies the degree to which those learning goals have been realized or how progress can be made toward their realization (How am I going?), students are in a better position to answer the question Where to next? With effective feedback, students understand better what is and what is not yet understood. Moreover, effective feedback helps students envision what their next learning challenges will be, plan what steps will enable them to meet those challenges, and monitor their progress toward overcoming those challenges. The more effective the feedback, the more likely students are to gain information that will enhance their performance.

While feedback given to students may answer all three of these formative assessment questions, it is quite important to recognize that the feedback provided operates on different levels and that feedback on some of those levels has significantly more impact than feedback on others.

How we respond to formative assessment information students generate for us to observe and interpret can take many forms and mean the difference between squelching growth and fostering it. Researchers (Clarke; Hattie and Timperley; Heritage, *Formative Assessment*), have made it abundantly clear that some of those forms of assessment feedback are significantly more effective in promoting cognitive and motivational growth in students than are others—and some can be devastating.

Quality and Delivery of Feedback to Students

Forms of feedback that are often seen in classrooms but that have negative consequences come in a wide range of responses and styles. Some send a critical judgment: "You just haven't made enough of an effort to get this done." Sometimes performance of one student gets compared with that of classmates: "Others got this some time ago. What are you waiting for?" At times, the feedback is too vague: "Just write more." And sometimes it's too complex for a student to gain any benefit. Sometimes the student receives

the assessment instead of specific feedback on the student's work: "You're doing very well." Another form of ineffective or innocuous feedback doesn't relate to a learning goal: "Read that again."

Other forms of formative assessment feedback have been found to be significantly more beneficial, and they contribute more to improved performance (Heritage, *Formative Assessment*). One form of helpful feedback is that related to clear learning goals. In these instances, students can understand and apply the feedback within the context of a current goal for learning and envision how progress is at hand. When gaps are seen and steps to closing those gaps are proffered, a student's step to success is not steep, and it's specific. A second form of helpful feedback begins with verification and validation of what's been done correctly. Knowing from her teacher's report that she has identified specific evidence that gives support to her claims gives a student a sense of confidence, success, and self-efficacy. A third form of beneficial feedback arises from situations in which a student has not been able to provide evidence for a specific claim, and the teacher, witnessing this lapse, is able to provide feedback information about how to go about finding that evidence. That feedback focuses on particular qualities of a student's work and how it can be improved. It provides information related to a process that fills the gap between what a student has understood and accomplished and an ultimate learning goal.

A fourth form of feedback entails a teacher providing hints and cues for improvement rather than giving the "right answer," which students may seek from the teacher. Hinting at how a student might reorganize a paragraph to make it work more effectively is often a more productive approach to learning than telling the student what should be done. A fifth form of feedback is that which comfortably matches a student's level of cognitive capacity and works within that student's zone of proximal development. It's the "just right" suggestion that enables a student to step up to the next level of understanding without feeling overwhelmed with information or under-informed about how to take that step up. Finally, feedback that encourages and builds self-regulation and metacognition makes a considerable contribution to students' development as expert learners who can transfer learning from one context to another. For example, students who discover new strategies to use when interrogating more complex texts, such as asking questions about claims a writer makes in the text or constructing counter-claims to challenge a writer's assertions, are students who are growing metacognitively through feedback.

Consider the following instructional story. Sally Mason, an ERWC teacher working through the module "Civil Disobedience," asks her students in the first draft of their argumentative letter or speech that takes a stand on a current social issue to provide research-based evidence supporting their arguments. She tells them that the success criterion based on her learning goal, which is that students will be able to link evidence to each claim they make in their written arguments, is the following: *Each* claim in their argument *should be supported with researched-based evidence*. Following a review of the drafts she gets from her students, Sally Mason said, "I've put a check mark next to each claim you made that's backed by research-based evidence. You now need to find claims that are not supported by evidence and include that evidence. If you have trouble finding research-based evidence, let's talk when I come by your desk."

How has Sally Mason's feedback met the criteria for effective formative assessment feedback that was outlined and described above? Sally has related the task she has given her students after she read and marked their drafts to a learning goal and success criterion. She has begun by verifying what each of her students has done correctly, and she has focused on the quality of her students' work. Furthermore, she has been specific about focusing on a particular quality of her students' work and what they will need to do to improve the quality of that work. She also provided cues for improvement of their drafts rather than

giving them right answers, and she's giving her students feedback that matched their cognitive needs. In addition, her feedback encourages and provides opportunities for students to build self-regulation.

Each time a teacher interacts with a student to evoke learning through the application of formative assessment, as Sally Mason did, the likelihood of students' progression increases when the teacher aims for the zone of proximal development. If we pitch outside that zone, they won't take a swing at the pitch. But, if we can throw our ideas into that zone so that they are tempted to take a swing for their own discovery or to advance their own learning and understanding, they're going to be more awake and watchful. We are most likely teaching at or near our best when we can generate formative assessment information that tells us where each students' edges of learning are at the moment.

Four Levels of Feedback

Feedback given to students can operate on four different levels and answer different questions germane to student learning (Hattie and Timperley).

- 1. Task level: How well do I, as a student, perform the task?
- 2. Process level: What do I, as a learner, need to do to understand or perform the task?
- 3. Self-regulation level: How can I, as a self-regulating learner, monitor and control actions that get the task done?
- 4. Self-level: How am I, as a learner, doing with respect to my mastery of the task?

Task Level Feedback. To give effective task-level feedback, teachers need to distinguish between two aspects of every task. To be successful and to progress in learning, students must know what defines a specific task that is to be done and how well they have executed the task. If learners thoroughly understand what a task entails and if they carry out the task successfully, then performance at the task level has been mastered. However, when students misinterpret a task, they need feedback that directs their attention to reviewing the task and reinterpreting it so that they understand exactly what is to be done. On the other hand, students may correctly comprehend a task but lack the knowledge or skills to carry it out. In such cases, teachers need to communicate to their students that, while they may understand the task to be performed, they apparently lack the precise knowledge or ability to complete it. With knowledge of results, students are often able to address their mistakes and subsequently perform the task correctly. On occasion, teachers may find it difficult to distinguish between errors in understanding a task and errors in performing it. When those occasions arise, teachers may have to analyze their students' performance to see what is preventing them from achieving established learning goals.

In the module based on Luis Valdez's play *Zoot Suit*, students are asked in a formative assessment to write an Exit Ticket that describes the "muddiest" point for them in the first act of the play. The underlying learning goal for the module to which this formative assessment relates is to "Read and comprehend a complex literary (dramatic) text." If the task is to comprehend the first act of the play, the Exit Tickets generated for the teacher about "muddiest" points provide information about what lies in the way of students' achieving an important module learning goal. When the teacher offers feedback focused on these "muddiest" points that students have experienced, she or he will be giving task level feedback to students that should remove muddy points and propel students toward their shared learning goal of reading and comprehending the play.

Process Level Feedback. While feedback at the process level is likely to be more effective than feedback at the task level, process level feedback usually requires that teachers observe and analyze their students' performance more carefully and deeply. Teachers providing task level feedback may simply inform students that their performance was correct or incorrect; however, teachers offering process level feedback should address the causes of faulty performance. If the analysis and insights that teachers offer to their students provide a remedy for students' errors or pathways to more productive thinking, then students' performance can be improved. For example, if a teacher recognizes that a student's composition lacks focus and wanders without purposeful development, the teacher's recommendation that the student give more time and attention to the planning process and monitor the relationship among topics in the composition could result in the student moving closer to the goal of writing a coherent, well developed essay. For example, after a first reading of Hamlet's "To be or not to be" soliloquy in the *Hamlet* module, students could complete a Process Quickwrite in which they describe strategies they have used to complete that first reading. When puzzled by what they read, what did they do? These descriptions of strategy use can provide teachers with metacognitive knowledge of their students' reading strategy repertoire and suggest paths for further development.

Feedback at the Self-Regulation Level. Feedback that promotes self-regulation is probably the most complex form of feedback that can arise during formative assessments. However, it may be the most valuable. A closer look at self-regulation reveals that seven major properties contribute to its complexity and mediate its effectiveness (Hattie and Timperley):

- 1. The student's ability to generate internal feedback;
- 2. The student's ability to assess one's performance;
- 3. The student's readiness to invest in obtaining and managing feedback;
- 4. The student's confidence in the correctness of feedback given;
- 5. The capacity for feedback to enhance self-efficacy;
- 6. The abilities and factors to which a student attributes success or failure; and
- 7. A student's proficiency in obtaining help.

Each of these self-regulation properties entails a network of cognitive and social conditions over which teachers have varying degrees of influence or control. A teacher's capacity to influence the generation of internal feedback in a student may be relatively small. However, a teacher could set up classroom and instructional conditions that help students learn how to get feedback on performance and how to put that information to optimum use to improve performance. Teachers can also deliver feedback designed to improve students' self-efficacy—their beliefs in their ability to carry out a task successfully—and thereby increase their motivation to address challenges and improve performance. For example, the Assignment Template includes a section entitled Reflecting on Your Reading Process that suggests several questions for discussion or a quickwrite that could easily foster self-regulation, such as "What reading strategies did you use or learn in this module? What strategies will you use in reading other texts? How will these strategies apply in other classes? In what ways has your ability to read and discuss texts like the ones in this module improved?"

Self-Level Feedback. Self-level feedback usually conveys an evaluation of student performance—positive, negative, or both—and carries little information about tasks that could be transformed into deeper task understanding, goal clarification, procedural improvements, or opportunities to enhance self-regulation. "Good" stamped on student work is unlikely to result in significantly better student work. However, praise focused on a process, such as the close analysis of evidence in an author's argument, that resulted in success or on self-regulation that contributed to learning goal attainment could contribute to a student's sense of self-efficacy. Rubrics used to evaluate student writing performance usually provide an evaluation of student performance in several dimensions, including the writer's response to the topic, understanding and use of the assigned reading, and the quality and clarity of thought that the writer manifests. These and other dimensions of performance provide self-level feedback and may be rated from superior to very weak in a rubric.

While we should not feel obliged to provide feedback on all four levels during formative assessments, we should recognize that feedback on some levels is more effective than feedback on others. Feedback at the process and self-regulation levels have been found to be the most effective. However, feedback at the task level can be effective when it addresses the use of a particular strategy or the process of self-regulation.

Table 3 provides a summary and overview of the role that we and our students play when answering questions that provide effective feedback: Where am I going? How am I going? Where to next?

Table 3. Phases and Focus of Formative Assessment for Teacher and Student

	Where Am I Going?	How Am I Going?	Where to Next?
Teacher	Clarify and communicate learning goals and success criteria to students.	Create an instructional environment for tasks, activities, and discussions that generates evidence of learning. Observe and analyze evidence of student performance and procedures that would improve it.	Give feedback to students that clarifies for them what they need to understand and/or do to close the gap between current performance and learning goals. Provide support for processoriented and self-regulated learning.
Student	Understand the learning goals and the success criteria.	Gain a clear picture of the gap between what learning goals are expected and what progress toward them has been achieved.	With feedback that helps students understand their progress so far, envision the next challenge, plan steps to meet the challenge, and monitor progress toward the learning goal.

With regard to module instruction, what content and processes would be subject to formative assessment? With regard to content, domains subject to formative assessment include vocabulary, central ideas or claims in texts, evidence supporting claims, and the recognition and description of a text's rhetorical situation. Think of content or conceptual knowledge as the "what" of a discipline: its key terms, concepts, theories, and findings. With regard to processes, these might include how to annotate, how to activate background knowledge and integrate it with new texts, how to read "with" and "against" the grain, how to negotiate voices, how to recognize and describe the elements of a rhetorical situation, or how to write a coherent paragraph. Procedural knowledge, in other words, is the "how to" of a discipline and involves the ability to apply content learning to new tasks and contexts using the methods of the field (Bean et al.; Paris et al.).

As this explanation of learning through the implementation of formative assessment demonstrates, we support and foster learning for our students by making a couple of foundational assumptions. As teachers, we strive to develop and transform our students into skillful learners. However, each student, as he or she becomes more skilled as a learner, presents us with a unique array of traits, abilities, and motives that we strive to address. With those foundational assumptions in mind, we can draw upon formative assessment to reach and teach in each student's zone of proximal development. This exploration of formative assessment has enabled us to review its key features and the importance of building a classroom community to implement those features. We have also reviewed stages in the formative assessment process and explored the central importance of feedback to students, including suggestions for its effective delivery.

Supportive Findings from Research on Formative Assessment

By implementing the formative assessment principles and practices described here, we can be assured that our decision will be informed by studies revealing the benefits of formative assessment. The contributions of formative assessment to learning have been known for some time (Black and Wiliam). However, more recently researchers have identified and combined for analysis a large number of individual studies using formative assessment whose cumulative results reveal with more accuracy its impact on students' learning. While its implementation across the disciplines has significant effects, its impact in English language arts classes were found to be especially beneficial (Kingston and Nash). Formative assessment used in English language arts classes generated an effect size equal to nearly one third of a standard deviation (d = 0.32). According to the What Works Clearinghouse "improvement index" that is used to translate effect sizes into the difference in percentile ranks between a treatment and a control group, an effect size of 0.32 would translate to 13 percentiles of improvement. With the assumption that the comparison student scores at the 50th percentile, the intervention student who benefits from formative assessment practices would score (on average) at the 63rd percentile. In another study, formative writing assessment made a difference in how well students conveyed their thoughts and ideas through texts (Graham et al.). Writing improves when students know that their teachers are monitoring their progress, receive feedback about their writing, and evaluate their own writing. An analysis of formative writing assessment studies generated an effect size of 0.77 and indicated that students engaging in formative assessment would score at the 78th percentile while comparison students would score at the 50th percentile. The impact reported in these two meta-analyses indicates that formative assessment is well worth our careful consideration as an approach to augment instruction and our students' learning.

Appendix A: Strategies for Formative Assessment

- 1. **No-Points Quiz.** A "no-points quiz" is a low-stakes strategy that can give teachers a "pulse check" on student comprehension. Removing a point value from a quiz helps students see learning as a process. One good way to use this strategy is to "quiz" students on differences between key terms (e.g., connotation and denotation or purpose and audience). By describing these differences in their own words, students begin moving beyond a receptive or introductory understanding of the word to an expressive or internalized understanding. This activity can be done as a written quiz the teacher collects or as a pairs' conversation that the teacher monitors.
- 2. Getting into Kahoots. Kahoot! (www.kahoot.com) is a service for creating and sending online quizzes and surveys to your students who respond through any device that has a Web browser. As the teacher, you can control the pace of the Kahoot! quiz or survey by imposing a time limit for each question. As students answer questions, they gain points for correct answers and for the timeliness of their answers. On the teacher's screen, students' names and a scoreboard are displayed. In order to participate in these activities, students do not need to have a Kahoot! account. They simply have to visit Kahoot.it and enter the PIN code that you give to them to join the activity.
- 3. **Transfer Check.** To confirm that students are able to transfer a concept from one context to another, such as exigence, ask them to identify that concept in a new textual setting. Collect, read, check for transfer, and return to students. Sharing selected examples with the whole class can provide opportunities for further instruction.
- 4. **Pencil Poll**. A pencil poll gives teachers a quick visual survey of student learning. The teacher asks the class a question that can be answered in only two ways (e.g., true or false, agree or disagree, fact or opinion, run-on or fragment, etc.). Students hold their pencils vertically for one response and horizontally for the other response. For instant electronic classroom feedback, see Poll Everywhere (www.polleverywhere.com).
- 5. **Write It Down.** Ask students to write down an explanation of a concept, such as pathos, or a summary of an argument in a text currently being studied. These explanations can be used as resources to begin a discussion about a concept or argument at the beginning of the next class. Their writing can be returned with your feedback.
- 6. **Doodle It.** Ask students to create a drawing that represents their understanding of a concept, such as rhetorical situation, instead of writing an explanation. Ask students to share their drawings in small groups, and select a few for whole class sharing.
- 7. **Red Light/Green Light.** Students hold an index card with a red circle on one side and a green circle on the other side. As they follow along with you and try to understand what's being said, they show the green "light" side of the card. When they miss information, need clarification, or don't understanding something, they turn the card to its red "light." This process may be considerably more effective than hand raising and gives immediate feedback on their levels of engagement and understanding.
- 8. **Video Interview.** In pairs, students conduct and record an interview on a digital device, such as a cell phone. The interview can focus on a range of topics. It could focus on the understandings that a student may have about a particular narrative or expository text being read or about the substance of a classroom discussion from an earlier class. One student will adopt the role of the interviewer, and that role entails the student creating a lead into the interview and perhaps a list of questions that can, flexibly, guide the interviewee through the discussion process. These videos can then be shared across

- teams and provide students with opportunities to compare and discover how the substance of their learning and understand may differ from other students in the class.
- 9. **Once Around.** Sometimes referred to as a whip, the "once around" asks each student in the class to orally share an example of content learning, often as quickly as possible. The teacher first identifies the category of knowledge students must share—for example, students may have to identify evidence that would support a claim in an argument. The teacher then chooses a student to start the Once Around, and each student calls out their response in turn.
- 10. **Application Cards**. At the end of an activity, lesson, or unit, students write down a potential real-world application of what they have learned. This formative assessment addresses the question "How will I ever use this in the future?" by asking students to imagine how they will apply their learning to new tasks and contexts. This strategy promotes greater transfer of learning. (Angelo and Cross).
- 11. **Just Talk to Each Other.** When faced with a particular writing activity from an ERWC module, have students explore with each other how they will approach that activity whether it involves an explanation of an idea, the demonstration of knowledge gained, or the presentation of multiple perspectives of an issue under examination through texts in the classroom. The teacher's role is to circulate around the room, listen to the conversations, and observe the content and processes that emerge from just talking.
- 12. **Metacognitive Moment.** Ask students to write in three to four sentences a description of a moment during the class in which they experienced metacognition of some kind. In what way(s) did they observe themselves thinking about their own thinking? What moment of metacognition occurred around reading or listening, such as asking a clarifying question about what was read or said? Did anyone try to summarize what was read or said while using their own language? Or did someone predict where a text or someone's line of thinking during a conversation was headed? Share examples of metacognition at the beginning of the next class to refine students' understanding and heighten their sensitivity to metacognition's sometimes unrecognized appearance.
- 13. **Mini-Presentations.** This strategy asks students to make a brief, sometimes ungraded, presentation on course content or procedural knowledge. Students could analyze a projected text; teachers can also assign individual slides in a PowerPoint to single students or groups of students. Teachers can then coach students as needed during the mini-presentation.
- 14. **Ask Questions for the Purpose of Clarification.** In your role as teacher, ask students questions to clarify your understanding of their thinking. Note on a white or blackboard what your understanding of a student's point of view as stated means to you. Confirm with students that you have accurately grasped their understanding of an idea, issue, character, problem, or process related to texts currently being read and investigated.
- 15. **One-Sentence Summary**. This simple exercise asks students to answer the following questions on a particular topic: Who? What? When? Where? Why? They then condense their response into a single sentence. (Angelo and Cross).
- 16. **Exit Slip**. Like the "ticket out the door," the "exit slip" requires students to demonstrate their learning and engagement in class before leaving. Divide a sheet of paper in three rows. First row: Things I Learned Today. Second row: Things I Found Interesting. Third row: A Question I Still Have. Teachers can collect and review the Exit Slips to make instructional decisions.

- 17. **3-2-1 Review**. This formative assessment strategy works well as an opening activity. Students demonstrate their understanding of a previous lesson by listing content learning in a structured review. The first category of review has three responses (e.g., list three prereading strategies); the second category has two responses (e.g., list two vocabulary strategies); and the third category has one response (e.g., list one definition of rhetoric). Students then share their 3-2-1 reviews, and the teacher clarifies any misperceptions before continuing with the next lesson.
- 18. **Two Roses and a Thorn.** On a card, students write down two things they liked about a chapter, reading, or a discussion and one thing that they did not understand, found difficult to absorb, or had a question about. These can be collected as a class session wrap up and used to begin the class the next time it convenes.
- 19. **Popsicle Stick or Playing Card Responses**. Used as a quick spot check, numbered popsicle sticks or playing cards that correspond to individual students can be a helpful strategy for assessing the learning of students who may be reluctant to volunteer responses. The teacher poses a question to the whole class and then randomly selects a popsicle stick or playing card. Only the student with the matching number (either the roster number or a matching playing card) answers the question. Use two decks of cards for the second option.
- 20. **Postcard.** As if sending postcards to friends, ask students to summarize events in a specified section of a work of fiction being read or an argument presented in an essay. Teachers provide a quick-note feedback for students' summaries. What key elements were captured in the summary? Any missing?
- 21. **Student "Closer."** Pre-assigning a student "closer" who will be responsible for summarizing the day's learning is an excellent way to promote greater student ownership of learning. In this strategy, a different student provides a "group paraphrase" of key content and discussion at the end of class each day. The "closer" answers the question "What did we learn today?" using his or her own words and limiting the response to under five minutes.
- 22. **Process Quickwrites.** Process quickwrites, or freewrites, help students articulate the means by which they achieve academic ends. This activity promotes metacognition and allows teachers to informally assess procedural knowledge by asking students to describe how they implement the reading, writing, listening, speaking, and critical thinking strategies they select for specific purposes.
- 23. **Peer Response to a Summary.** The "peer response to a summary" asks students to identify and evaluate required elements in a partner's summary, thereby providing students with an opportunity to apply their knowledge of this genre while receiving feedback on their own writing. A class discussion of essential elements for the summary of a specific text may be beneficial to many students prior to writing that summary.
- 24. **Vocabulary Self-Assessment**. Used as a post-reading activity, a "vocabulary self-assessment" can be a helpful progress-monitoring strategy. Students compare their familiarity with each word before and after reading the text, charting their progress from receptive word knowledge to expressive word knowledge.
- 25. **Charting Multiple Texts.** This postreading activity provides a quick assessment of students' reading comprehension. Teachers may see at a glance if students have understood the issue and central claim of each text in a set and if they can produce examples and comparisons. Students complete the chart below as they progress through texts.

Charting Multiple Texts

Text Information	What is the text's big issue?	What claim does the text make?	What are examples from the text?	What do you think about the text's claims?	What are your examples?	How does this text connect with other texts?
Title:						
Author:						
Genre:						
Title:						
Author:						
Genre:						

- 26. **Fuzzy/Clear.** Using index cards or half sheets of paper, students record something from the day's lesson that is still "fuzzy" or confusing to them on one side of the paper and something else that is now clear to them on the other side. Teachers can then address "fuzzy" content in a subsequent lesson.
- 27. **Muddiest Point**. Like Fuzzy/Clear, Muddiest Point targets student confusion to identify areas for reteaching. In this highly efficient formative assessment strategy, students simply answer the question "What was the muddiest point in_____?" (Angelo and Cross, 1993).
- 28. **Student-Generated Test Questions**. In this activity, students write questions for a possible quiz or test after studying the material. Questions could be multiple choice, true or false, matching, or constructed response. This strategy allows teachers to assess what learning students consider important, what kinds of questions they consider fair, and how well they understand key content. (Angelo and Cross).
- 29. Collaborative Text Reconstruction (aka guided composition or dictocomp). The purpose of a Guided Composition is to elicit a paragraph of student writing in order to informally diagnose students' strengths and weaknesses in the area of sentence construction. Students first listen as the teacher reads a paragraph from a selected text aloud at a normal speed. The teacher next reads the paragraph aloud again while, this time, the students take notes. Students then try to reconstruct what they heard using their notes. At the end of the activity, students will edit their paragraphs, applying what they have learned about English grammar.
- 30. **Ticket out the Door**. This progress-monitoring strategy requires students to demonstrate some brief content knowledge before they leave class. Students first create their "ticket" by tearing off a small square or slip of paper; they then write an easily accessible piece of content knowledge on their ticket to hand to their teacher on the way out of class. Only students who have a correct answer may leave class. If students have an incorrect answer, they must try again and go to the back of the line. This strategy provides a quick formative assessment of student learning.

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