

Models, Critique, and Descriptive Feedback

Checking for Understanding during Daily Lessons

Using Data with Students

Learning Targets

STUDENT-ENGAGED ASSESSMENT

Student-engaged assessment is a system of interrelated practices that positions students as leaders of their own learning.

Models, Critique, and Descriptive Feedback

Standards-Based Grading

Conferences

Student-Led

Passage Presentations with Portfolios

Celebrations of Learning

Several years ago, I visited the classroom of a skilled and veteran high school physics teacher in Oregon who had sought my help as an instructional coach. Observing her classroom, I was hard-pressed to guess why she might be dissatisfied—the culture of the class and her lesson were excellent. Students were motivated and eager. After class she explained her need: "It's lab reports. Their lab reports are terrible! It's driving me crazy." I asked if this was a problem with just this section. "No, all my classes. I grade their papers and mark them up with comments and corrections and it's always the same. They don't know how to write in science."

I asked her if she had ever shown her students a model of a good lab report. She replied that she had not. We looked through student portfolios, and she found an example of a strong report from one of her students. We found that student and got her permission to use her work as a model—she was delighted. We removed her name, to avoid the distraction, and made photocopies for the next class.

We conducted the next class as a critique lesson on what makes a good lab report. Every student looked through the model report and text coded—marked it up with their thoughts about what was done well and what questions it raised. They conferred with each other, and then, as a whole group, we discussed the features of the lab report that they felt were strong.

Students were amazed at the depth and length of the report and the clarity of language. They admired the author's precision and vocabulary and quoted from the report when they spoke. It made their typical reports look, in their words, "pretty sorry." A number of them laughed about how low their standards had been for this work. One young man turned to the teacher and said, "Mrs. C., is this what you wanted to us to do? Why didn't you show us this in September?"

For all the correcting we do, directions we give, and rubrics we create about what good work looks like, students are often unclear about what they are aiming for until they actually see and analyze strong models.

-Ron Berger

Tools for Improvement

It is a challenge to think of a skilled profession that does not rely on models, critique, and descriptive feedback to improve performance. Imagine fields such as medicine, journalism, or software development without clear models, and without continual critique and revision. Professionals in these fields know what a high-quality product looks like—whether it's a Pulitzer Prize—winning article or a software application with record-breaking sales—and these models provide them with a reference point for productive critique and feedback that will enable them to improve their own work. Professional dancers have watched thousands of dance performances and have those etched in their minds. Professional basketball players have watched thousands of games. They have a clear picture of where they want to go, and they need continual critique from coaches and colleagues to get there.

Picture a ballet troupe without someone continually adjusting posture and position, or a basketball team never critiquing strategies during halftime or analyzing their play on video. These ongoing feedback practices, which help us improve, are essential in nearly every field. Despite its prevalence in the world, this kind of on-the-job, on-the-spot feedback, based on strong models, is still strangely absent from many schools and classrooms. To be sure, grades and test scores abound, and occasionally students get assignments returned with comments, but these "results" are often thin and too distant from the moment of learning or effort to be useful. Now more than ever, with the introduction of rigorous Common Core State Standards, students need models of work that meet standards, and they need structured opportunities for critique and descriptive feedback so that they too can produce work that meets the standards. Students and teachers alike will benefit from seeing—sometimes even holding in their hands—examples of what they are aiming for.

We distinguish between group critique lessons—sessions to build students' common understanding of skills and quality (think of a medical team observing and analyzing an expert surgeon performing an operation)—and descriptive feedback—to improve a particular piece of work by an individual student (think of an editor working with a technical writer to improve a draft of a manual). These practices are not discrete—many times they overlap. Both share the goal of helping students understand what they need to do to improve. It is useful, however, to distinguish between them, because there are purposes and strategies for group

critique lessons that are distinct from individual descriptive feedback, and teachers need to be adept at both.

Both practices center on models of work that give students a clear vision of what they are aiming for and set standards for quality. It is difficult for students to understand what good work looks like in a genre unless they have seen and analyzed it. Scoring rubrics are helpful for detailing the qualities in the work for which students will be assessed, but they do not provide a picture of what those qualities look like. We can create a rubric for a good jump shot in basketball or for a vivid descriptive paragraph, but to understand them we need to see them. Models bring standards to life.

Models: Exemplars of work used to build a vision of quality within a genre. Models are generally strong in important dimensions, which are discussed in critique lessons. They can be drawn from current or prior student work or the professional world or can be teacher created.

Critique lessons: Through critique lessons, students and teachers work together to define the qualities of good work in a specific genre or to think about the ways all students can improve their work through revision. This form of critique is a lesson, with clear objectives, and is designed to support the learning of all students, not primarily to improve the work of one. Models, which serve as the reference point to generate criteria for quality work, are at the heart of critique lessons.

Descriptive feedback: Descriptive feedback may take place in the form of a teacher-student conference, written comments from the teacher, or during a peer-to-peer feedback session. The constructive, precise comments that make up descriptive feedback specifically address a particular piece of work by a single student and are articulated in a way to raise the quality of the work toward the gold standard of the model.

Why These Practices Matter

Models, critique, and descriptive feedback are critical components of student-engaged assessment. The practices help students meet standards by giving them the tools they need to answer the question that may paralyze them when they get their work back for revision: "now what?" Often, students simply copyedit for conventions based on teacher corrections—grammar, spelling, and punctuation—and don't actually revise the work.

Instead, picture a student participating in a group critique of a strong historical essay, chosen by his teacher as a model. The teacher has decided to focus only on the introductory paragraphs—each student reads and text codes the model for those paragraphs. The class then generates a list of the qualities that stand out as effective (e.g., thesis clearly stated). Those qualities are discussed and written on chart paper in the front of the room.

When his teacher returns the first draft of his essay the next day, the student also receives a copy of the list of qualities that make for a good introduction to an essay that he and his classmates generated. He must now revise the introduction to match those qualities. He looks over his own paper and the need for revision is clear, as is the substance of what he needs to add and change. Critique, descriptive feedback, and the use of models are all practices designed to give students a vision of quality so that they know what they are aiming for.

Making Standards Real and Tangible

Standards do not create a picture of what students are aiming for. They are typically dry technical descriptions. When a Common Core literacy standard requires that stu-

"I like models because they give a visual representation for people who learn better visually than by reading or listening."

—Paige, seventh-grade student, Grass Valley Charter School, Grass Valley, California dents "use organization that is appropriate to task and purpose" or "use a variety of transitional words and phrases to manage the sequence of events," what does that mean? What does that look like?

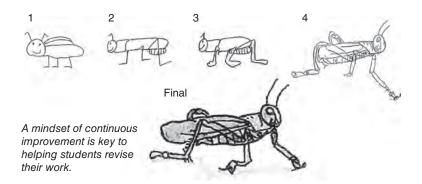
Within a student-engaged assessment system, we start with learning targets, which put the standards in concrete terms that students understand. Students should then be provided with models

that make those targets come to life. Finally, they should analyze those models to build a shared understanding of what makes them effective.

Building a Mindset of Continuous Improvement

Critique and descriptive feedback help students understand that all work, learning, and performance can be improved. We can tell students that their potential to learn is great, but they won't believe it, especially in areas in which they don't feel confident, until they actually see themselves improve. There is nothing that does

Figure 4.1 Natalie's Grasshopper—Multiple Drafts



this more effectively than when students work through multiple drafts, rehearsals, or practices and end up creating work or performing at a level that is beyond what they thought possible. Participating in critique and giving, receiving, and using feedback teaches students the value of effort and revision. Figure 4.1 is a great example of the power of a mindset of continuous improvement.

Instilling Responsibility and Ownership of Learning

Critique and descriptive feedback emphasize skills of critical analysis and selfassessment and ask students to make important decisions about their work and learning. Because the path to meeting learning targets is clearly defined by a shared vision of what quality looks like, students can work independently and build skills confidently.

Contributing to Collaboration and a Culture of Safety

To be effective, critique and descriptive feedback require a deliberate and sustained attention to emotional safety and depend on skills of collaboration. These practices help a classroom become a learning community dedicated to getting better together.

Common Core Connections

• Examining models and generating the criteria for success gives students a road map for meeting standards. They know what they are aiming for and how to get there.

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- Both the math and literacy standards explicitly demand that students become independent learners who can "critique the reasoning of others."
- The need for students to evaluate the validity and quality of reasoning and craftsmanship permeates the standards. The strategies described in this chapter build students' skills to do so in a sophisticated way.
- A quality critique requires students to point to evidence to support their claims, a key to Common Core success.

GETTING STARTED

Developing a Positive Culture for Critique and Descriptive Feedback

An essential starting point for critique and descriptive feedback in any classroom is ensuring that the guidelines *be kind*, *be specific*, and *be helpful* are the backbone of every class. Formal and informal feedback and critique flow from these. Safety and encouragement, as well as structure and clear learning targets, will set students up for success.

Just about everyone has a feedback nightmare, a time when they felt hurt or judged by someone's feedback or criticism. Some students are particularly vulnerable, especially if they have not experienced much school success and have received many messages of negative criticism (both implicit and explicit). School and classroom guidelines must be carefully built and reinforced, but individual feedback also must be tailored and shaped with the particular student in mind. There is not a template or cookie-cutter approach that will work for every student.

This kind of safety can be hard to monitor—teachers must be vigilant and firm, especially when building a classroom culture with a new group. Very young students often don't realize that their comments may be perceived as mean. They can be candid even when it's hurtful to others and need to learn how to word things carefully. Sometimes older students, particularly adolescents, may intentionally but subtly undermine a peer's work—such as complimenting work with a sarcastic tone or facial expression. It is imperative that the teacher stops the critique the moment problems happen, deals with unkind or untruthful comments or tone firmly, and reestablishes norms. Eventually, students will trust and reinforce the norms themselves.

Because group critique lessons often focus on exemplars from outside the class-room, they offer some distance from a student's personal feelings, and reinforce skills students will need in their future careers, a key Common Core connection. They also represent a rich opportunity for students to experience what constructive feedback looks and sounds like.

Snapshot: Building Culture with Fourth-Graders

"To build habits that establish a culture in which quality is the norm, I begin with a basic but demanding task that each student can accomplish, yet all can improve: the challenge of drawing freehand a straight line," says Steven Levy, Expeditionary Learning school designer and former fourth-grade teacher at Bowman Elementary School in Lexington, Massachusetts. "I introduce standards of quality that guide our work throughout the year." Students develop the language, norms, and skills of describing quality through group critique as they analyze lines.

Levy assigns every student the task of drawing a straight line freehand and uses the work to demonstrate generating criteria, feedback and critique, revision, planning ahead, taking care of resources, and above all the norms of a safe, collaborative, constructive classroom. "Practicing these drawings is a particularly effective way to begin the year because everyone has equal access to the assignment. No one can do it perfectly, so everyone is challenged."

"When students have learned this process of producing quality work, they are ready to apply it to more complex tasks. We now go through the same process to develop standards for writing, for presentations, and for major projects. We do not follow the exact steps in the line exercises for everything we do. Sometimes I give more explicit instruction or direction at the beginning. At other times, depending on the effectiveness of the students' work, I recommend additional critique sessions or more practice of discrete skills between drafts. The steps are simply tools and processes designed to help students take more responsibility in producing quality work."

Choosing the Right Work Models

Because critique lessons are based on good models, the most important part of the lesson takes place before it even begins. Learning how to recognize and select powerful, generative models for critique lessons is essential and it takes practice. Models should show students where they are headed. The exemplars don't need to be perfect but must be good models of features that are connected to learning targets. The more compelling the models are, the more powerful the critique

can be. Ideally, teachers will begin building an archive of good work models that are gathered and stored for specific purposes. When a teacher needs to teach the

"I think the difference in math is that our models aren't 'products,' but ways of thinking. We critique our class exit slips often as models of thinking with the intent of helping students identify common misconceptions. We look for 'brilliant mistakes' that students can learn from and that lead to deeper understanding of the learning target."

—Lin Tarr, math teacher, William Smith High School, Aurora, Colorado format or genre of a research paper, for example, she has a file of research papers by former or other students to draw from for critique lessons.

A teacher might choose to create exemplary models herself, or models with the types of problems she thinks her students will encounter. Models from the professional world can also be useful, and set a high and authentic bar, especially for older students. If models of current student work are used, it is important to choose samples that represent different approaches to the same assignment, or different strong features,

so there is little duplication in what is viewed and discussed. There should be a specific reason for each piece chosen. If the class is going to spend valuable, whole-class time considering a piece, there should be a clear reason that relates to the goal of the critique.

Modeling with Weak Work

Although it is most important to have exemplary models, it can also be useful to have examples of pieces that are poorly done in different ways, particularly in those areas that the teacher feels her current students may find challenging. For example, to help students remember to be less repetitive with sentence structure in a composition, it can be very powerful to have them critique an anonymous student composition that is fraught with repetitive language. The image of this weak work will stay with them and can be discussed regularly to remind the group to be careful to avoid its pitfalls.

When using weak work, there are some cautions. First, the work must be anonymous. Students should never be able to recognize it as the work of a current or former student. Second, the work must be treated respectfully. Modeling mean-spirited critique will promote an unkind classroom climate. Last, not all weak work is a good

choice. Ideally, the work is compelling in its flaws. For example, if it is very strong in some areas but confusing in others, it can invite wonder and analysis. The best weak work is not an example of a student who wasn't trying, but rather a student who was putting in effort and created something interesting to consider, but had confusions that resulted in problems that are likely to crop up for many students.

Turning Critique *Sessions* into Standards-Based Critique *Lessons*

A critique session becomes more than a simple exercise in closely examining student work when it leads students to new learning, application of knowledge and skills, and meeting standards. It then becomes a standards-driven critique lesson. As with all student-engaged assessment practices, standards-based learning targets are the foundation of every critique lesson. Critique lessons will not be effective without clear learning targets and models of what meeting the learning target looks like.

The following sample in-depth critique flows from a clear learning target, based on a fourth-grade Common Core math standard. It illustrates how effective critique can be as a lesson. Many concepts and areas of content that the teacher would be addressing in a more conventional lesson can be addressed more powerfully and concretely in a lesson connected to a critique of real work. Rather than a teacher telling students about the dimensions of good work in that genre, the students discover and name those features themselves. It is clearer, more engaging, and more memorable than a lecture-style lesson. Critique lessons like this actively involve students in analyzing work against learning targets and compel them to use academic vocabulary and cite evidence for their assertions. These are key skills for meeting Common Core standards.

Snapshot: In-Depth Critique in a Fourth-Grade Math Class

Common Core standard 4.MD.A.3: Apply the area and perimeter formulas for rectangles in real world and mathematical problems.

Long-term learning target: I can use formulas to find the area and perimeter of spaces in the real world and in math problems.

Supporting learning targets: (1) I can recognize when the formulas for rectangular areas and perimeters are used correctly in student work and can explain why, using evidence

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from the work. (2) I can describe what a good solution to a real-world area and perimeter problem looks like and explain why.

Step one: Choosing work samples for a clear purpose: The teacher has a collection of student work from prior years of students measuring rectangular spaces in the school, drawing labeled diagrams, and calculating area and perimeter. From this collection, she creates a packet with four work samples—two samples are fully accurate (though different in approach); one is partially accurate; one is fully inaccurate. All the work is anonymous and there are no labels as to which samples are accurate and which are not.

Step two: Individual challenge (five minutes): The teacher hands a packet of the four samples to each student. Students silently and individually analyze the samples and try to make sense of them, determining which they think are accurate and why.

Step three: Group analysis (ten minutes): The students are clustered into groups of four. Each group discusses which of the samples they feel is accurate and justifies their opinions with evidence from the work.

Step four: Whole-group critique (fifteen minutes): The teacher leads the class in an analysis of the samples. First, she introduces the long-term learning target and the supporting learning targets for the lesson. Next, she leads the class in analyzing each of the four student samples. She begins with what they noticed about the samples—without judgment—focusing on what strikes them about the work. She then focuses on accuracy, discussing which ones they feel are correct and why, citing evidence. After this, she leads the group in discussing which samples are good examples—those that are clear and correctly labeled and include well-explained reasoning.

Step five: Small group brainstorm (five minutes): Small groups brainstorm a list of the attributes of a good solution—accurate and well presented.

Step six: Synthesis: Building of collaborative criteria (fifteen minutes): The teacher runs a whole-class discussion, eliciting comments from each group. She charts their thinking about what a good solution to a real-world rectangular perimeter and area problem looks like.

Define the Purpose for Each Critique Lesson

Critique lessons can have a variety of specific purposes—setting standards of quality and developing criteria for work (as in the example), supporting focused revision, or fine-tuning final presentations, products, or performances. It is important to make the particular focus of the critique clear from the outset. The teacher frames the critique with learning targets so that she can keep track of guiding the inquiry to address them. Clarity about learning targets should not prevent the critique from producing unplanned discoveries, clarifications, and new ideas or directions, and it is important for the teacher to celebrate and identify these.

Teacher-facilitated critique lessons that include looking together at work models can be used to address learning in a variety of disciplines. The lesson could focus on the following:

- Content (e.g., simple machines, an historical timeline)
- Concepts (e.g., recurring themes in history, binary numbers)
- Skills (e.g., keyboarding, interpreting a bar chart, factoring equations)
- Product formats or genres (e.g., business letter, political map, watercolor portrait)
- Habits of scholarship (e.g., group collaboration during field work excursions, participation during literature circles, hallway behavior)

The following critique lesson snapshot is a good example of how clear focus and purpose can lead students to a productive understanding of expectations for quality. A similar lesson can also be viewed on the accompanying video of third-graders at Presumpscot Elementary School in Portland, Maine.



Watch video: "A Group Critique Lesson—Models, Critique, and Descriptive Feedback"

Snapshot: A Gallery Critique in a Third-Grade Classroom

Ron Berger visited Lori Andrusic's third-grade classroom at Capital City Charter School in Washington, DC, to conduct a guest critique. He led a whole-class gallery critique on story openings. The students were working to improve their skills in writing narratives, which corresponds to third-grade Common Core writing standards, W.3.3: Write narratives to develop real or imagined experiences or events using effective techniques, descriptive details, and clear event sequences. For this critique lesson, Berger narrowed the focus to one small but vital aspect of narratives—the opening lines. He asked Andrusic to cut and paste the first line (or lines, as warranted) of the first-draft story of each student into a single document. This document was in each student's hands at the beginning of the lesson.

With Andrusic prepared to list students' ideas on chart paper, the class read aloud all the opening lines of the stories. Berger then asked the students if there was one that really stood out and grabbed their interest.

A boy's hand shot up: "This one—written by Hector," he said. "I love this one: 'The haunted car. It all started when . . . '"

"What is it about that opening line you like so much?" Berger asked.

"I don't know. . . . I just do."

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"Is it a particular word? The flow of the language? An idea?"

He smiled. "It is a word—haunted. I love that word."

"Why do you think you love that word?"

"I don't know. It's powerful?"

Andrusic turned to her chart paper which she had titled, "Strategies for Good Story Openings," at the top and wrote the first of the class's discoveries: powerful words.

"Does anybody else see an opening with a powerful word?" Berger continued.

"I do," said a girl. "'Once there were some ninjas in China; they were magic ninjas.'"

"And what's the powerful word there?"

"Magic. If they were just plain ninjas . . . boring." (The class nodded their agreement.) "It's magic that makes you interested."

One boy raised his hand with concern: "I don't think I used any powerful words in my opening," he said. "I don't think my story has anything interesting until half-way down the first page. I'm going to do some rewriting."

Another girl raised her hand. "I think it's not just that haunted is a good word . . . it's also putting together haunted with car—that's unexpected. Haunted house, that's usual, but haunted car—that's weird, and interesting."

The class had additions for the list: combining words in unusual ways, using the unexpected.

The class was suddenly full of ideas, hands shooting up around the circle. The list grew longer. And then a quiet boy raised his hand tentatively. "Can we go back to Hector's—the haunted car?" he asked. "I think it's more than just the word haunted. I think that story opening has music."

"What do you mean, music?" Berger asked. "Can you describe it?"

He sang the opening theme to Beethoven's Fifth Symphony with dramatic flourish: "Da-da-da-DUM!" The class erupted in delight and repeated his notes.

"Tell us more. Where do you see that?"

"'It all started when . . . da-da-da-DUM!' I can tell it's a mystery! It has that mystery opening. Like a fairy tale opens with, 'Once upon a time,' but a mystery opens like this."

This really got the class thinking. Are there standard openings for genres of stories? Did they want to use them? The discussion took off and they were engaged in generating strategies for good story openings for half an hour. Eventually Berger had to say a regretful goodbye to lead critique lessons in other classes, but when he ran into these same students at lunch they gathered around quickly to resume the dialogue. "Hector isn't at lunch," they told Berger. "He's back in the room working on his story about the haunted car. He doesn't usually write so much, but now he just can't stop!"

Determine the Right Timing in a Sequence of Curriculum for a Critique to Be Held

Depending on the goals and learning targets, critique can be useful at a variety of times in a curriculum or long-term study:

- Introductory teacher-facilitated lesson using previously collected models of work—to set a high standard for quality and to construct with students a framework of criteria for what constitutes good work in that domain or product format.
- In process, during the creation of work—to support focused revision, clarify and tune student efforts to apply criteria for quality, refocus student concentration and momentum, and introduce new concepts or next steps. The snapshot of good story openings on the previous pages is a good example of this.
- Just before final exhibition of work—to fine-tune the quality of the presentation, display, or performance for an audience. Often final details and touches make a major difference in quality.
- After completion of an assignment—to reflect on quality and learning and to set goals.

Depending also on the assignment or project being created, each of these points in the sequence of study suggests a different focus and style of critique lesson. Ideally a form of critique will be used at all points in the process.

Choose a Structured Format or Protocol to Match the Goals

A discussion protocol—a planned format or agenda—can help create a more productive conversation. Protocols help structure group discussions by accomplishing the following:

- Defining a sequence of discussion prompts
- Structuring time, allocating a set amount of minutes for each section of a discussion
- Defining roles, assigning particular perspectives or responsibilities to various group members
- Defining norms for the give-and-take of ideas and for listening habits

There are well-known protocols for critique, such as the collaborative assessment protocol¹ or the tuning protocol (McDonald, Mohr, Dichter, & McDonald, 2007). There is, however, no single protocol that works well in all

¹ Developed by Steve Seidel and Project Zero colleagues at the Harvard Graduate School of Education.

classroom settings. Critique protocols work best when they are designed or customized by classroom teachers to meet the particular needs of their lesson objectives and classroom settings. All protocols, whether established or invented, benefit from being tweaked and refashioned at times to suit particular situations.

Strategy Close Up: The Tuning Protocol

Purpose: To identify strengths and weaknesses of an anonymous work model

Time: Approximately thirty minutes

Grade level: Fifth and higher

Roles: Presenter or teacher, participants (ideally in small groups)

Steps

1. Presentation by presenter or teacher; participants are silent (four minutes)

- · Provide context for the work being discussed
- Present a question to the group that will help them focus their feedback on one aspect
- Reading and examination (three to eight minutes)Students examine the work, focusing on the question the presenter or teacher asked.
- 3. Clarifying questions (three minutes)
 Clarifying questions are matter of fact; save substantive issues for later. Clarifying questions are answerable with "yes," "no," or a single brief sentence. The teacher or presenter is responsible for making sure that clarifying questions are truly clarifying in nature.
- 4. Processing by participants (ten to fifteen minutes) Participants talk to each other about the teacher's or presenter's work, with particular attention to the focusing question, whereas the teacher or presenter remains quiet, taking notes as appropriate. The group begins dialogue by concentrating on the following:
 - Strengths
 - Disconnects and problems
 - Questions for probing or further reflection on the part of the presenter
- Teacher's or presenter's response (five minutes)
 Presenter shares significant points, recognizes powerful feedback, and identifies next steps.

Two Types of Critique Lessons

Gallery Critique

In a gallery critique, all students post work for everyone to view closely. A gallery critique works best when the goal is to identify and capture only positive features in the selected work that can help everyone improve. Only a small set of the posted work may be cited. With work from the whole class, there is obviously going to be a lot of work with problems; this is not the time to try to point them all out. The point of a gallery critique is to find effective ideas and strategies in strong examples that students can borrow to improve their own work.

If the work is visual, it can be posted for viewing in a gallery style. If the work is written, it may be posted on a wall or copied and distributed. For written work, short pieces or a portion of a larger piece (e.g., a multistep word problem, the lead of a paper, a poem) work best. The critique of the first lines of stories featured previously is an example of this.

A silent gallery walk enables students to focus on how work does or does not meet learning targets and standards for quality.



Clearly there are advantages to sharing every student's work, such as building accountability, excitement, shared commitment, and a realistic sense of how one's work compares with others. However, it is important to create safety for students whose initial performance on the assignment was weak. A protocol for a gallery critique might look something like this:

Introduction: The teacher explains the steps of the protocol and the learning targets. He reminds students of the norms of giving feedback—*be kind, be specific,* and *be helpful.*

Step one: Posting the work (five minutes): Each student tapes his or her first draft to the wall.

Step two: Silent gallery walk (five minutes): Students view all the drafts in a silent walk, and take notes identifying strong examples of a predetermined focus (e.g., descriptive language, use of evidence, elegant problem solving, experiment design).

Step three: What did you notice? (five minutes): The teacher leads a discussion in which students are not allowed to make judgments or give opinions; they can comment only on things they noticed and identified.

Step four: What is working? (fifteen minutes): The teacher leads the class in a discussion of which aspects of the posted drafts grabbed their attention or impressed them. Each time students choose an example, they need to articulate exactly what they found compelling, citing evidence from the work itself. If they're not sure, the teacher draws them out until they can point to evidence in the work and name something specific. The teacher also points to examples he or she is impressed with, and explains why. The insights are charted by the teacher to codify specific strategies that students can use to improve their drafts.

In-Depth Critique

A single piece of work (or set of related pieces) is used to uncover strengths or to highlight common areas in need of revision or gaps in knowledge that need to be addressed (e.g., use of evidence, descriptive language, topic development). Unlike a gallery critique, wherein the focus is exclusively on positive aspects in the collection of work, an in-depth critique analyzes a particular piece to determine what aspects are working and which are not. The goal is to recognize and name

particular features that are effective or ineffective so that the class can learn from them. The story that opened this chapter—high school physics students analyzing an exemplary lab report—is an example of in-depth critique.

Case Study

Critique and Descriptive Feedback at the Center of the Curriculum

Adapted from a piece written by Jane Dunbar, kindergarten teacher at ANSER Charter School in Boise, Idaho, during her class's learning expedition on birds, in this learning expedition, extensive fieldwork and research led students to their final product—beautiful, high-quality bird cards (see figure 4.2 for an example of one of the student's bird cards), which were sold throughout the state to raise money for bird habitats. The use of models and critique lessons were central to Dunbar's curriculum.

By February, we are ready to start the month-long project. Each child will research and draw a scientific representation of one bird. Although all kindergartners have the support of a fifth- or sixth-grade buddy for research, the drawings are all their own. Their exceptional drawings develop over time through carefully layered instructional practices, and a classroom climate that makes all things seem possible to these young, impassioned learners. By building a classroom community that supports strong character development (courage, compassion, respect, discipline, and integrity), children learn to challenge themselves, to give and receive constructive criticism, and to take risks as learners.

Steps to the Final Product

Best work: Kindergartners know that they must attend to lessons, practice, reflect on their work, and have the courage to take risks as learners and learn from their mistakes. I honor effort and intentions in this classroom each and every day. Kindergartners have been internalizing these behaviors since September.

A culture of quality: My role is to provide quality materials (paper, colored drawing pencils of every shade), exemplary photographs to work from, and modeling of how to visualize and then draw lines corresponding to the shape of a given bird.

Rubric: Students look at an exemplary bird drawing done by a former kindergartner. Next to this drawing is the photograph that was used as a model. "What do you notice?" I ask. Children look closely at similarities and differences. I help them tease generic comments into specific, explicit descriptions. After this close examination of work, I ask students what is important to notice when drawing a bird. The children develop criteria for the rubric. I use their words and add icons for each characteristic.

(continued)

Collaborative critique: Children continue to look closely at each other's work. This time, the rubric, the photo, and each draft of a peer's work is displayed. We focus our attention on the latest draft. I ask the children, "What do you notice?" I try to remind students that they only "notice" and that they do not make evaluative comments. I then ask the group, "What would you do on the next draft if this were yours?" And, "What would you change?" I challenge them for details. For example, "What about the eye?" and "What line, shape, color needs attention?" From this discussion the child whose work is displayed makes his or her own decision on what will be the focus of the next draft and writes an intention on a sticky note (see the following section). The child has been given many suggestions, but he or she has ownership of this next important decision of how to proceed. A collaborative critique of one child's work can take between ten and twenty minutes.

Compliment circle: A compliment circle follows the critique session. The student who has shown work calls on his or her peers for compliments. With both the critique and compliment circle, I have found it important to be sure each featured student gets the same number of constructive comments and compliments. Attention to balance saves any unintentional negative comparison between students and their work.

Sticky notes: Each child, using the rubric as a guide, sets an intention for the focus of his or her efforts on the next draft. Writing the word or drawing the icon given on the rubric, the kindergartner focuses now on his or her own work and sets an intention. I place the sticky note above a new white piece of drawing paper and alert teachers and other adults present as to what the child is attempting to accomplish with this next draft. Adults can then support the child's intentions.

Doing More Than They Thought Possible

Most children do four to five drafts before marking the rubric and formally assessing their own work. Each draft will take thirty to forty minutes. At this point in the process, children decide if they have accomplished "best work" or if they wish to try again. A surprising number will want to try again. They are hooked. This process has led them far beyond what they ever thought possible.

The Role of the Teacher in the Critique Lesson

The teacher must take an active role in facilitation throughout a critique lesson. This process works best when it looks organic (emerging entirely from student ideas) but is in fact skillfully shaped. The teacher chooses students strategically for comments, governs the flow of discussion and contributes enthusiasm, interjects compelling comments to build interest and makes key points, and reframes student observations when necessary to make them clear to the group and connected to the learning targets. The teacher needs to remember that the critique is

Figure 4.2 Sample Bird Card



Kindergartners in Boise, Idaho, created a beautiful boxed set of bird cards. This extraordinarily high-quality work by very young students was made possible by critique lessons at the heart of the curriculum.

a lesson, with clear learning targets, and should not hesitate to take charge of the flow to ensure the session is productive.

Be a Strong Guardian of Critique Norms

The most important teacher role is to foster and sustain a critique culture that is emotionally safe for students and productive for learning. The critique rules, or norms, must be explicit and tracked vigilantly during the lesson to ensure that all students feel protected from ridicule (even subtle sarcasm or facial expressions) and that comments are specific and instructive. The critique rules should require participants to *be kind*, *specific*, and *helpful* in their comments. In addition to guarding against any hurtful comments, this also means guarding against vague comments (e.g., "I like it," "It's good"). Participants must point to specific features (e.g., "I think the title is well chosen," "Including the graph makes it much clearer

to me"). It means that repetitive comments or tangential comments that derail the momentum of learning should be avoided. The participants should be aware of the goals for the critique lesson, and their comments should relate to the group effort to build understanding.

To do this well, the teacher must convey that she is in absolute control of the rules and will tolerate nothing that is mean-spirited. At the same time, she must also encourage positive, helpful comments. It is also useful to "critique the critique," that is, for the teacher to continually note and compliment insightful or thoughtful comments and to lead the class in reflection about what constitutes good critique.

There are additional guideline suggestions that can help to build a positive climate. Examples of such guidelines include the following:

- It should always be clear that it is the work itself, not the author of the work, that is the subject of the critique.
- Use "I" statements (e.g., "I don't understand your first sentence" rather than "It doesn't make sense").





- Begin comments, if possible, with a positive feature in the work before moving on to perceived weaknesses (e.g., "I think the eyes in your portrait are very powerful, but I think adding eyebrows would give it more feeling").
- Frame ideas, when possible, as questions rather than as statements (e.g., "Why did you choose to leave out the illustration on this draft?" rather than "It was better with an illustration").

These norms are especially important when students are sharing their own work with their classmates, but they apply even when the work is from outside of the class. Explicitly teaching and using critique rules will strengthen students' critique skills as well as their abilities to hear and use descriptive feedback.

Keep the Critique Moving at an Interesting, Energetic Pace

To keep the critique engaging, the teacher should be sure the work being analyzed is accessible and clear. Photocopies should be made for each student or posted and projected work should be close enough for students to easily see. This preparation will help the teacher keep the lesson lively, as will using the following strategies to compel student involvement: involving a range of voices in the discussion, reading work aloud with a strong voice or choosing selected students to read aloud, or calling students up to the board to point out exactly what they see in the posted work.

Distill, Shape, and Record the Insights from the Critique

Many of the insights that the teacher hopes students will come to may arise from student comments, but the teacher may need to jump on them, repeat them, reword, or reframe them. Later they may even be codified for the class in the form of criteria or next steps. It is helpful to return to these insights during the critique, explicitly attributing them to the original student ("Tamika's theory" or "Jonathan's observation"), even though the teacher has perhaps changed and deepened the original comment. If particular key insights don't arise, the teacher shouldn't hesitate to seed them as questions or discovery challenges in viewing the work ("Did anyone notice . . . ," "Can you see an example of . . .") or simply add them directly.

In a gallery critique, the teacher can't rely just on students picking the examples that are most useful and generative—she must direct attention to examples that are important bridges to the learning targets, and ones that will stimulate new insights. She can use gallery critiques for other purposes as well—to give public affirmation to students who have made particular progress, or conversely, to use

the critique to push students who have exhibited less than best effort. If there is a guest critique expert from the professional community, the teacher can seed the critique by explaining to the expert the learning targets and goals for the session, and perhaps help to direct his or her attention beforehand to particular pieces of work. (For more on using guest critique experts, see "Strategy Close Up: Speed Feedback").

Focus on Naming the Specific Qualities and Strategies That Students Can Take Away with Them

It is not useful for students to leave the session with the idea that "Aliya is a good writer" or "The book review we read was great," but rather, "Aliya used eight strategies that made her piece good, and now I know them and can use them." Nam-

"Since the 1990s all California students in fourth and seventh grades take a state writing assessment. As part of the preparation for this summative exam, students examine available sample writing against the four-point rubric. Both the samples and the rubric are available from the California Department of education website. As a result of this consistent instructional practice, students' writing skills have improved. More important though, students are better prepared to look critically for evidence of excellence in their own writing compared to a rubric. They can name their own strengths and hone in on specific needs in their own writing."

—Brian Martinez, principal, Grass Valley Charter School, Grass Valley, California ing the effective qualities and strategies must be explicit, openly discussed and negotiated, and must result in terms that students understand—in their language. Sometimes it is not even clear to the teacher at first what feature in the work is being cited as strong—this is a perfect opportunity to engage the class in a spirited discussion to define and name the feature. The more concrete the naming of features, the better. Charting the names of features and hanging them on the wall for reference helps. Vague insights put on a chart, such as "Use 'voice" are less helpful, particularly to weaker writers, than specific suggestions such as "Include dialogue," "Use verbs other than said," "Use punctuation marks other than periods." Again, the teacher should not hesitate to reshape student ideas into words that she feels will be clear and helpful, and to add to the list if students have omitted important qualities or strategies.

The process of naming qualities and strategies can also be a step in creating a rubric of what constitutes quality for this genre or skill, or can refer to an existing rubric that the class uses, supporting that rubric with specific strategies. The critique lesson is most effective in creating specific, rather than general, criteria lists or rubrics—instead of "what makes good writing," the list would address "features of a good research paper." Table 4.1 shows an excerpt from a sample rubric for a letter-writing assignment with specific, detailed criteria for proficiency on one learning target. Additional learning targets for this assignment (not shown) focus on domain-specific vocabulary, organization, and writing conventions.

Table 4.1Sample Rubric

Writing invitation:

You are an individual who wants to affect what kids eat in school. Write a letter to the superintendent to persuade her to change the school food policy.

Long-term learning target:

I can write an analysis of substantive topics or texts using valid reasoning and sufficient evidence.

Tean write an analysis of substantive topics of texts using valid reasoning and sufficient evidence.					
Learning Target	Beginning	Developing	Proficient	Advanced	
I can develop a clear position or claim about food policy and support it with valid reasoning and sufficient evidence (derived from Common Core writing standard, W.9–10.1.	 Topic is only loosely about school food policy or is muddled. No counterclaims are presented. Evidence only loosely supports the position or claim or counterclaim and there is minimal evidence or no evidence cited. 	Topic addresses school food policy but lacks a clear position statement. Claims and counterclaims are present but lack coherence and do not build on the position or claim. Evidence only loosely supports the position or claim or counterclaim or there is minimal evidence present.	Author develops a clear position on school food policy. Author demonstrates an ability to anticipate audience's knowledge and concerns through the development of the claims and counterclaims. Author includes well-chosen, relevant, and sufficient evidence from text to support the position or claim and counterclaims.	Position is clear and provides a unique perspective. Multiple related claims and counterclaims flow seamlessly together. Extensive and varied evidence (e.g., quotes, data) from a variety of sources back the position for each claim or counterclaim.	

Teach the Vocabulary

The Common Core State Standards require students to "acquire new vocabulary, particularly general academic and domain-specific words and phrases." In line with

"Rubrics help you understand what quality work is. They tell you the truth. You may have thought you did very good, but then you get your score and you see what you need to work on."

> —Alex, third-grade student, Grass Valley Charter School, Grass Valley, California

the Common Core, this kind of vocabulary acquisition is the foundation of effective critique. Imagine a fifth-grade writing lesson with the following learning target: "I can use teacher feedback to make decisions about how to revise my script," derived from Common Core writing standard, W.5.5: With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or

trying a new approach. In order to meet this learning target, students must understand the academic vocabulary words feedback and revise. The teacher may support students in deconstructing a word like revise—identifying the prefix re- and explaining its meaning as again and the root vise as derived from the word vision, which means to see. Additionally, students must use domain-specific vocabulary such as script, narrator, character, lines, conflict, and theme to give effective feedback.

To use a metaphor, if critique is like surgery, carefully cutting into a piece of work to determine what is working well and what is not, then the surgical tools are the words we use to dissect the piece. If a student can only use simple terms to describe a piece (e.g., "It's good. I like it"), it's like attempting surgery with a butter knife. Students need sharp precision in their language to be effective surgeons (e.g., "I think the narrator's voice sounds too much like a kid our age and not like someone his character's age," "There is a confusion here between correlation and causation"). The need for precision gives students an authentic reason and immediate application for learning new vocabulary and putting it to use.

Providing Descriptive Feedback to Individual Students

There is a great deal of overlap between whole-class critique lessons and individual descriptive feedback in the mindset, skills, and practices that teachers must bring to this work. As the story from the physics classroom illustrates, showing

Feedback is typically a private exchange between teacher and student.



students an excellent model can in fact be a powerful form of feedback (e.g., "Why didn't you show us this in September?"). Teachers give students feedback all the time. In this section, we propose that teachers think more analytically and strategically about the nature of the feedback they provide.

Descriptive feedback is distinguished by these features:

- The focus is on supporting the growth of an individual student or small group, improving a particular piece of work, performance, skill, or disposition.
- It is typically an exchange between teacher and student, or student and student, not a public learning experience for the class.
- It is nested in a long-term relationship (e.g., teacher-student, coach-player, supervisor-worker). Maintaining a constructive relationship must be an implicit focus in all feedback conversations, whether spoken or written.
- Individuals are sensitive when receiving personal feedback. It is much more likely that strategic, positive comments will result in improvements than will criticism.
- Feedback ideally flows from strong knowledge of the student—knowing the student's strengths and weaknesses, knowing where she is in her growth and what she needs to spark the next step of growth.

In some cases, feedback will come from a guest expert or someone a student doesn't know well. For example, a martial arts class might be visited by a highly honored sensei. This teacher knows nothing about the students but can watch a class and offer highly specific feedback to each student. Because of his expertise and fresh eyes, this expert is able to offer advice that may be new and constructive. It builds excitement when students know they will receive feedback from an authentic expert, impels them to work harder, and models for them the concepts and vocabulary of the field. It is important to structure these sessions carefully and prepare the guest experts and students for a successful experience.

Strategy Close Up: Speed Feedback

In our schools, students frequently produce work modeled after a real-world format. For example, rather than a typical book report, students might instead write book reviews and maintain a blog for other students their age. In such cases, bringing a professional

into the classroom to offer feedback can add huge value for the students who are motivated to make their work mirror that of professionals in the field.

In Ron Berger's former sixth-grade classroom, where students were working on architectural blueprints of residential homes for fictional clients, a different local architect visited the classroom for ninety minutes on three consecutive Fridays. Each architect began with a fifteen-minute presentation to the class, followed by a work period during which he or she circulated the room offering feedback to students.

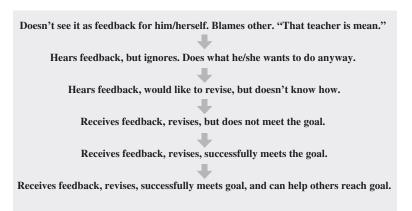
To ensure that all twenty-four students had the chance to meet with the architect, the class used a "speed feedback" protocol, based on speed chess. The architect met with each student for three minutes, looking over the plans and pointing out positive or problematic features. To monitor time, a student ambassador stood behind the architect with a stopwatch and gave a signal when time was up. Using this protocol, every student received feedback from three different architects, which enabled them to produce high-quality work that mirrored the work of real architects as closely as possible.

Planning for Effective Feedback

Analyze and Adapt Your Current Means of Giving Feedback

Every teacher spends much of the day giving students feedback—collectively and individually. The question is, how much of this feedback is actually used by students to improve their learning? Figure 4.3 is a continuum of how a student might hear and use feedback.

Figure 4.3 Continuum of How Students Hear Feedback



Often the students most readily able to meet the final two points on the continuum are already the most capable, skilled, and successful. "Students can't hear something that's beyond their comprehension; nor can they hear something if they are not listening or are feeling like it would be useless to listen. Because students' feelings of control and self-efficacy are involved, even well-intentioned feedback can be very destructive ('See? I knew I was stupid!'). The research on feedback shows its Jekyll-and-Hyde character. Not all studies about feedback show positive effects. The nature of the feedback and the context in which it is given matter a great deal" (Brookhart, 2008, p. 2).

Recent research related to student mindsets highlights that without the right mindset, students are often incapable or unwilling to act on feedback, however accurate and useful it may seem to be. For example, teachers regularly read student essays and provide feedback for revisions, then are surprised that the students either don't choose to revise or incorporate only surface copyedits instead of real revisions. Researchers David Yeager and colleagues (2013) created a randomized experiment in which middle school student essays that had been marked by teachers with suggested revisions had a sticky note added to the paper. Half the students received a control message: "I'm giving you these comments so that you'll have feedback on your paper." The other random half was given the treatment message: "I'm giving you these comments because I have very high expectations and I know that you can reach them."

The difference in the sticky note messages is subtle. It would hardly seem possible that it would have an effect. However, the effect was dramatic. African

"Descriptive feedback helps me by letting me know what I need to improve and what I did well on. It makes my final product feel more complete."

—Rachael, seventh-grade student, Vallejo Charter School, Vallejo, California American students in the control group revised their essays after getting them back at a rate of 17 percent. African American students in the treatment group revised their essays at a rate of 71 percent. Just the message that their teacher believed in their ability to improve made a vast difference in their willingness to try again and incorporate suggestions.

It helps immensely when descriptive feedback is part of a comprehensive approach to student-engaged assessment—when students are clear about

the learning targets and are asked to set goals for their learning, and when they are taught the language and norms of critique and shown positive models of giving and receiving feedback. In essence, when students are treated as partners in assessment from the outset, they will be in a much stronger position to make use of a teacher's feedback.

The good news is that like every other important instructional practice, feed-back can be fine-tuned and improved through careful attention to its content and delivery. As students become more proficient using feedback, they become more independent learners.

Consider the "How"²

Timing: How Often and When Should Feedback Be Given?

- Always be sure that there will be time and opportunity for the student to use the feedback.
- Immediate feedback is best for factual knowledge (yes-no, right-wrong), but delaying a bit will make sense for more complex assessments of comprehension and thinking processes.
- Provide feedback as often as you can for major assignments. The best feedback is ongoing.

Quantity: How Much Feedback Should Be Given?

- Choose priority points that relate to learning targets.
- Consider the individual student's developmental needs and how much he or she can take in at once.

Written versus Oral: What's the Right Balance between These Modes?

- Oral feedback, provided as students are working, is often the most effective and efficient.
- If giving oral feedback, it is often useful to ask the student to repeat back what
 he or she heard to guard against misinterpretations.

 $^{^2}$ This section is based on the work of Susan Brookhart and Connie Moss (Brookhart, 2008; Moss & Brookhart, 2009).

- Use individual conferences for more substantive feedback.
- Provide targeted written feedback on the work itself or on an assignment sheet, rubric, or criteria sheet.

Audience: What Is the Right Balance between Group and Individual Feedback?

- Individual feedback conveys the message that the teacher cares about the individual's learning. It is also most tailored and responsive to an individual's needs.
- Group or whole-class feedback works if everyone has missed the same thing or a clear pattern of weakness has emerged.

Tone: How Words Are Used Matters a Great Deal in Giving Effective Feedback.

- Effective tone:
 - Be positive
 - Be constructive when critical
 - Make suggestions not prescriptions or mandates
- Ineffective tone:
 - · Finding fault
 - Describing what is wrong but offering no suggestions
 - Punishing or denigrating students for poor work

Clarity: Feedback should be understandable and user-friendly. Similar to learning targets, feedback should be framed in language students can readily understand. Assessment expert and author Grant Wiggins tells a useful story: "A student came up to [a teacher] at year's end and said, 'Miss Jones, you kept writing this same word on my English papers all year, and I still don't know what it means. 'What's the word?' she asked. 'Vag-oo', he said. (The word was vague!)" (Wiggins, 2012, p. 11).

Consider the What—the Content of Feedback

Focus: Feedback can be focused on the work or task, on the process of learning, or on the way a student self-regulates and uses his or her thought processes to accomplish a task. It should not be focused on the student personally and

personal comments should be avoided. Feedback should always be connected to the goals for learning and be actionable, offering specific ideas for what to do next and how to improve.

Comparison: Effective feedback compares student work or performance with criteria and with past performance, benchmarks, and personal goals. Norm-referenced feedback, which compares a student's performance with that of other students, is generally not useful. It doesn't help a student improve and often damages the motivation of unsuccessful students.

Function: The function or purpose of feedback is to describe how the student has done in order to identify ways and provide information about how to improve. Evaluating or judging performance does not help students improve. (For example, grading work in a draft stage tends to shut down motivation to revise as does stating that the work is simply "good" or "bad.")

"If only using 'descriptive' vs. 'evaluative' feedback were simply a matter of wordsmithing! We could all learn how to write descriptive feedback just as we learned to write descriptive paragraphs in elementary school. Unfortunately, part of the issue is how the student understands the comment. Students filter what they hear through their own past experiences, good and bad" (Brookhart, 2008, p. 24). This brings us back to the importance of fostering strong collaborative cultures, building relationships with students, and setting the work in the context of student-engaged assessment more broadly. There are many strategies and techniques but unfortunately no shortcuts.

IN PRACTICE

Developing Structures to Make Feedback and Critique a Part of Daily Lessons

At the classroom level, respectful and helpful critique and descriptive feedback can be incorporated every day into all aspects of schooling, improving the quality of student understanding, work, effort, and character. Students learn to self-critique and critique others, respectfully and helpfully, as part of a productive learning environment. As the practices are implemented more consistently across classrooms in a school and understood and used more effectively by teachers, they

are tightly aligned to standards and more closely integrated as part of a studentengaged assessment system.

Identify Teacher-to-Student Feedback Strategies for Daily Lessons and Long-Term Assignments

- Structure individual conference times (can be as brief as several minutes) during work time. Focus on brief, clear, specific comments and on interactions with students as they work.
- Use small-group mini-lessons to address common areas of weakness.
- Target one skill at a time. Focus comments on one or two important areas (don't copyedit!). Connect feedback to learning targets, using rubrics to highlight areas for improvement.
- Assess effectiveness of feedback—examine student work and performance to see if feedback was used. Are students moving toward meeting learning targets and standards?

Identify Peer and Self-Assessment Strategies

- Teach students the purpose and language of feedback.
- Return frequently to learning targets and ensure that students understand them.
- Model giving effective feedback for students. Ask students to self-assess using similar language.
- Emphasize self-assessment over peer assessment—research has demonstrated it is more effective in improving learning (Brookhart, 2008).

As the following case study of Susan McCray's eleventh-grade English class illustrates, the use of learning targets, goal setting, descriptive feedback, group critique, and mini-lessons on needs highlighted in the feedback fit together to support all students in meeting the standards. This lesson can be viewed in the accompanying video.



Watch video: "Descriptive Feedback Helps All Students Meet Proficiency— Standards-Based Grading"

Case Study

Descriptive Feedback in a High School English Class at Casco Bay High School in Portland, Maine

As students enter Susan McCray's eleventh-grade English classroom, they are handed back the first drafts of their oral histories. They quietly digest the descriptive feedback from McCray while they wait for class to begin. McCray starts them off by reminding them of the long-term learning target for the assignment, "I can write a quality oral history," and the supporting learning target for the day, "I can use my feedback effectively to identify changes to make in revising my oral history."

McCray uses a rubric to provide highly focused and descriptive feedback to each student. Along with their drafts, she has given them a copy of the rubric, on which she has highlighted particular areas that each student needs to address, filled in with concise written comments. One student explained, "We were handed back our first drafts with feedback. Right now we're looking at what changes we need to make it the best possible piece."

Students then write entrance tickets to review the learning targets and to set specific work goals for the class period. Next, McCray asks two students to read their drafts and has students listen for evidence of quality oral histories. One student observes her classmate and notes, "She really went after description of every move they made." This condensed version of a group critique lesson primed the pump for students to make use of their own individual feedback.

Her reading of the first drafts enabled McCray to identify three common needs among the students—descriptive detail, ideas, and organization. She forms small minilesson groups on those topics. The mini-lessons run consecutively so that students can choose to attend more than one if they wish. Though students choose whether or not to attend the mini-lessons, McCray's feedback points them in the right direction.

Following the mini-lessons, McCray circulates and offers students individual feedback. "Because they've had the mini-lessons, those are much shorter conversations," explains McCray. "I've been working to come up with structures that allow me to get to more kids and help everyone to meet the standards."

Preparing Students to Be Effective at Giving Peer-to-Peer Feedback

One of the most common structures for feedback and critique in classrooms is the use of student-to-student peer feedback conversations. Many teachers will ask their students to "find your writing critique partners and give them advice on their first draft" or something similar. In most cases, this practice is largely unproductive. Strategic, effective, specific feedback is a difficult enough practice for adults. For most students, it is impossible without guidance. If we listen in to those peer-to-peer conversations in many classrooms, we will find the following:

- Students who can only give vague comments
- A confusing mix of copyediting (suggestions for spelling, grammar, and punctuation) with content or language suggestions (*Note*: Helping students distinguish between these two types of feedback supports them in better understanding Common Core language standards—about conventions and grammar—and Common Core writing standards—about student thinking.)
- Students who finish their comments quickly and then engage in off-task discussions

Peer-to-peer feedback can be effective when the conditions are right, when students are practiced in giving targeted feedback, and they have clarity on the

"One of the greatest challenges is to get students to want feedback. I'll ask students, 'How did your peer help you?' And if a student's reply is, 'They said it was good enough,' I say, 'Then go get them to help you! You don't want to be 'good enough.' You want to be great! Go to them and say you really want their help and their ideas. Don't let your peer 'critiquer' get away with not helping you.'"

—Tracy Horner, teacher, Vallejo Charter School, Vallejo, California specific dimension of the work they are analyzing. For example, in a science class where students have been collecting data and creating spreadsheets to categorize those data, the teacher discovers problems with how students have constructed their spreadsheets. Using models, she runs a class critique lesson in which the students analyze models of strong and weak work, and identify in the weaker work the problems she has noticed. Students then work with a partner to analyze each other's current spreadsheets to see if any of those problems are present. In this case, the class is likely to be very effective in giving helpful feedback to each other. The snapshot of Austin's butterfly is a good example of

students having the skills focus, as well as the appropriate vocabulary, to provide their classmate with feedback that supported him to do exemplary work.

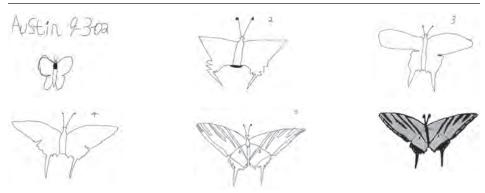
Snapshot: Peer Feedback in Small Groups

At ANSER Charter School in Boise, Idaho, first-grade student Austin was preparing a scientific illustration of a Western Tiger Swallowtail, a local butterfly (see figure 4.4). The class had looked together at models of butterfly illustrations and had created criteria and a rubric for a strong illustration. In fact, they created two rubrics: one for the shape of the wings and one for the pattern inside the wings. Students were charged with using the eyes of scientists to examine a photograph and make sure its features and details were accurately presented in their illustration.

The problem was that Austin was just a first-grader, and when he began, he didn't look that carefully at the photograph; he defaulted to the icon of a butterfly shape that was in his head, and his first draft was a generic first-grade butterfly outline that looked nothing like a Tiger Swallowtail. Austin met with a small group on the carpet in front of the whiteboard, and, using the criteria for wing shape, his peers gave him kind, specific, helpful suggestions of what he could change to make his drawing look more like the photograph. (For example, they suggested that the wing shape in the photo was triangular, whereas his drawing had rounded wings).

Austin was happy to take their advice and quickly created a second draft that had more angular wings, and included the "swallowtails" at the base of the wings, as his peers suggested. The growth in his second draft was appreciated by his peers, and they suggested he include both an upper and lower wing on each side, which he then did in his third draft. His peers again appreciated his growth but pointed out that he had "gotten round again" on the upper wings, and so on his fourth draft he made the upper wings more angular. His peers were delighted that the shape looked right now and suggested that he add the pattern, which he did for draft five. His sixth and final draft was a beautiful and accurate colored illustration and showed remarkable growth from his first draft, thanks to the help of excellent peer feedback.

Figure 4.4 Austin's Butterfly



Once students have learned the process of giving specific feedback effectively in these formal protocols, there is a positive phenomenon that can develop in which students begin giving each other informal critique, appropriately and respectfully throughout the day.

Critical Moves for Deepening Student Engagement

Critique and descriptive feedback cannot be effective practices unless students fully own them. In fact, both practices involve a dynamic partnership between teachers and students as they critically analyze work, give, receive, and use feedback. It takes strong models, time, and practice before critique and descriptive feedback truly take root in a classroom. Table 4.2 illustrates the who, what, and

Table 4.2 The Who, What, and Why of Models, Critique, and Descriptive Feedback

What Do Teachers Do?	What Do Students Do?	What's the Result?
Create quality learning targets and assessments—based on state and Common Core standards—and use models of what work that meets the standards looks like.	Understand what it looks like to meet standards.	Students have greater engagement and ownership of learning because they know what they are working toward.
Establish strong norms for giving and receiving feedback and critique: be kind, be helpful, and be specific. Follow up and be vigilant about using the norms.	Practice the norms when participating in critique or giving feedback to peers.	Students experience a safe culture that deepens each time they repeat the feedback and critique process.
Conduct group critique lessons to identify the qualities of work models that meet learning targets. At first, explicitly teach and model critique, and critique the critique until students are adept.	Analyze models and identify characteristics of quality work that meets learning targets. Identify how they can apply this learning to their own work.	Student work improves as they learn to identify what quality means in any given genre.
Build a collection of exemplary student work that is reflective of common assignment formats. Analyze that work with students in order to create criteria lists and rubrics for quality work in each format, based on student- and teacher-designated strengths.	Look closely at work models and identify the qualities that make it strong.	Students learn disciplinary and academic vocabulary and critique skills. They build a common vision of quality work and learn to use criteria lists and rubrics to improve drafts of their work.
Build lessons that include frequent opportunities for descriptive feedback. Strategize how to give feedback and what feedback to give.	Listen to feedback and apply it to their work.	Because feedback is targeted toward specific needs, students can use it productively to improve their work.
Over time, build a repertoire of structures and protocols for feedback and critique. Engage students in self-assessment and peer-to-peer feedback.	Become more proficient at giving, receiving, and using feedback. Take ownership of the process.	An effective culture of descriptive feedback and critique is established in the classroom. This leads to higher levels of achievement and student ownership of learning.

why of how models, critique, and descriptive feedback can increase engagement and achievement.

SCHOOLWIDE IMPLEMENTATION

A strong and consistent schoolwide practice of critique and descriptive feedback is an essential component of a student-engaged assessment system. School leaders establish the vision and rationale for the practice through modeling and focused professional development. The culture of positive, constructive critique must permeate the building, modeled by adults and students.

All of the norms, purposes, and processes of good critique and descriptive feedback can be practiced by the adults in the community—in team meetings, faculty sessions, and one-on-one interactions—which builds the dispositions and skills of a schoolwide culture of critique. A principal who allows faculty members to revise her plans or decisions during faculty meetings, for example, can model a culture of critique. This sends a powerful message about the school's ethic of continuous improvement.

School leaders also play an important role in supporting teachers to collect and archive models of strong student work. This starts by ensuring that teachers have deep knowledge of state and Common Core standards and strong accompanying learning targets. It is important that models are aligned to these learning targets and supported by criteria lists and rubrics. The collection of models should grow and change over time. When it is an expectation in a building that the geometry teachers will have a file drawer of high-quality, student-written proofs, and a history teacher will have a similar file of strong student-written essays, then both students and teachers in the school will come to expect to see and discuss models of quality to improve their understanding and work. We have highlighted some of the key leadership actions that will support school leaders to build a culture of critique and descriptive feedback throughout the school.

Lay the Groundwork

 Provide time for staff to know their standards deeply, including the instructional shifts required by the Common Core. Support them in developing strong accompanying learning targets.

- Conduct professional development and establish norms and strategies of critique and descriptive feedback that the staff agrees to practice.
- Embed critique and descriptive feedback into a coherent plan for studentengaged assessment.
- Model self-critique and descriptive feedback in faculty meetings and professional learning settings. It is powerful for faculty members to see leaders who publicly appreciate and use critique of their decisions to improve.

Build Teacher Capacity

- Establish a regular and consistent practice of collaboratively looking at student
 work against learning targets to ensure that critique and descriptive feedback
 are effectively improving student performance.
- Support the creation of grade-level libraries of student work as well as benchmarked exemplars to be used as models for teachers and students.
- Provide professional development to help teachers develop standards-based critique lessons that build skill and content knowledge through the critique process.

Support Teachers to Deepen Their Practice

- Establish structures that promote feedback, critique, revision, and sharing of work (e.g., galleries of student work, portfolios that show the evolution of a project over time in response to feedback).
- Provide time and space for teachers to engage in protocols for presenting their
 work (e.g., a proposed unit study, project, or lesson) to peers on the faculty,
 receiving feedback and perhaps suggested resources. This might even be followed by a protocol for peer observation or lesson study, with teachers observing each other's instruction.
- Document critique lessons through video and other means to help foster the ongoing use and refinement of practice.

WHAT TO EXPECT

When teachers use work models to show students what's possible, it can be magical. In the accompanying video, Ron Berger shows young students several drafts of "Austin's butterfly." When he reveals Austin's accurate and beautiful final draft, the

children gasp. They lean in, look closer, and make comments like, "Oh, my gosh!" Their subsequent discussion, in which they develop the criteria for a quality final draft, is testament to the power of the practices described in this chapter to help students be leaders of their own learning.



Watch video: "Austin's Butterfly: Building Excellence in Student Work—Models, Critique, and Descriptive Feedback"

Despite the transformational power of these practices, teachers and school leaders must take care (and time) to develop the habits and skills students need to make the most of them. As with all student-engagement practices, nurturing a growth mindset is an essential foundation. Students must believe in their own power to improve their work—with this belief in place, the use of models, critique, and descriptive feedback will give them the skills they need to do so. Teachers must also start from a place of deep understanding of state and Common Core standards so that they can choose models, build critique lessons, and provide feedback that will enable students to meet the standards.

With time and practice, teachers will experience the power of these practices to guide their curriculum. Critique lessons won't be special events; they will be a key part of teaching students content and skills and engaging them in thinking critically about their progress toward quality work. Over time, teachers will gather and use a collection of student work models to use again and again, and the practice will take hold throughout the school, in classrooms, and in professional development.

We have identified some of the benchmarks that teachers and school leaders can expect at the beginning, intermediate, and advanced phases of implementing a robust practice of using models, critique, and descriptive feedback.

Beginning

- Students learn the basic guidelines of critique and descriptive feedback: *be kind, be specific,* and *be helpful.* Teachers and school leaders begin to internalize these norms in professional settings as well.
- Through the use of models, students expand their preconceived notions of what quality work can look like at their grade level.

- Students learn to identify the key steps involved in producing high-quality work. This gives them greater ownership of the path to producing their own high-quality work.
- Teachers develop a repertoire of protocols to structure critique lessons.
- Teachers use learning targets to guide their critique lessons and descriptive feedback.
- As students see how the practices help them meet their learning goals, they begin to exhibit confidence in participating in critique and using feedback.

Intermediate

- Teachers see the opportunities critique lessons (as opposed to critique sessions)
 hold for teaching content and skills and helping students meet state and Common Core standards.
- The interrelationship of models, critique, and descriptive feedback supports students to do their best work. Models give them a vision of what quality looks like. Critique lessons involve them in identifying the criteria for success. Descriptive feedback supports them to revise and improve their work.
- Teachers are strong guardians of critique norms, ensuring that the lessons are productive.
- Lessons based on models, critique, and descriptive feedback are routine.
- Faculty members are more comfortable and proficient in using critique and descriptive feedback in their professional interactions.
- Teachers build and use a collection of student work models.

Advanced

- Student work models and exemplars are documented and shared extensively throughout the school.
- With scaffolding, norm setting, and skill building, students can engage in effective peer feedback.

- Students exhibit pride and ownership of their work and learning. Quality student work is visible throughout the school and important student and teacher discussions about quality are commonplace.
- School leaders model critique and descriptive feedback practices in faculty meetings and other professional settings.
- There is a strong culture of continuous improvement with every member of the community asking, "How are we doing?" "What's the evidence?" and "How can we improve?"
- Teachers, students, and families can clearly see the ways in which quality student work demonstrates evidence of students meeting state and Common Core standards.

COMMON CHALLENGES

Not Spending Enough Time on Culture Building and Norms Setting to Create Safety

Time is a critical investment. The pressure to get to the heart of content and skills standards in critique and descriptive feedback can lead teachers to shortchange valuable culture-building and norms-setting activities. This is a serious mistake because the time spent on creating a culture of safety and skills of critique will make the sessions much more effective and will also serve students well as lifelong strategies for success in the workplace.

Lack of Clarity about Goals, Learning Targets, and What Work That Meets Standards Looks Like

Know where you are headed. The learning targets and models that bring standards to life give critique and descriptive feedback power and focus. Once students understand and can reflect on where they are headed, they are prepared to receive and use feedback. Being clear about what success looks like, and the steps necessary to get there, will help more students meet standards.

Choosing the Wrong Work to Critique

Good critique depends on compelling work models. If work is chosen haphazardly or for the wrong reasons, the critique lesson will flounder. At the most basic level, interesting and engaging critique lessons require interesting work. Even if it is flawed or full of mistakes, it should be flawed in an interesting way—a way that can lead to learning for all students.

Neglecting the Teacher Role (Thinking That Critiques Will Run Themselves)

The teacher remains a teacher. It is not enough to choose a good protocol and a compelling piece of work for the critique. The teacher must constantly pay attention to the pace and flow of discussion and the range of participation and focus on capturing and shaping the insights from the discussion. Pushing for clarity and substance, being vigilant about the norms, adding insights, and naming and charting takeaways are all vital roles for the teacher.

Neglecting the Student Role

Student ownership is key. If the process drags or is too focused on a small number of needs, or if the teacher dominates the discussion, student engagement in the critique won't be sustained. Teachers need to ensure that the critique lesson has an energetic pace, that every student understands his or her role and participates, and that the learning targets are clear.

Underestimating Student Mindsets and Sensitivities to Hearing Feedback

Feelings and mindsets matter. Students bring a wide range of experiences—both positive and negative—and different personalities and mindsets to the class-room. Some are more confident and receptive to feedback and others may be anxious or sensitive. It is vital to nurture a growth mindset in all students so that they believe in their capacity to improve. Teachers must get to know individual students and the range of emotions they bring to the learning process. The selection of approaches to feedback and critique should be shaped by individual needs. Specific, strategic, positive feedback is almost always more effective than criticism.

Underestimating the Power of Language and Timing

Strive for balance in feedback. There are many potential pitfalls in teacher-to-student feedback. It can be too much, too little, too late, too judgmental, or too hard to understand. Take time in solo planning and team discussions to consider what feedback is effective, what is not, and how you can tell the difference.

Asking Students to Engage in Peer Feedback When They Are Unprepared to Succeed

Students need tools. Giving strategic, effective feedback is difficult for adults. For unprepared students, it is almost impossible. Peer feedback is often vague and unproductive for both students. Useful peer feedback occurs when students are clear on specific skills and can apply that clarity to a specific focus for the feedback.