The Artful Learning Communities project is designed to help teachers assess student learning in art, including motivating students to self- and peer-assess.

Detail from Figure 3.

Formative Assessment in the Visual Arts

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Classroom assessment is a hot topic in K-12 education because of compelling evidence that assessment in the form of feedback is a powerful teaching and learning tool (Hattie & Timperley, 2007). Although formal evaluation has been anathema to many art specialists and teachers (Colwell, 2004), informal assessment in the form of feedback is not. As educators in other subjects have discovered, there are myriad ways in which assessment can not only measure and document student learning but also—and more importantly—actually promote learning (Andrade & Cizek, 2010). This article shares examples and briefly documents the work of art specialists in Brooklyn, New York, who have experimented with the latest assessment techniques in order to increase student engagement and learning.

The Artful Learning Communities project described in this article was supported by a grant from the U.S. Department of Education. The goals of the project were to (1) strengthen the capacity of elementary and middle school arts specialists to assess standards-based learning in the Arts; (2) promote increased student achievement in the Arts through ongoing classroom assessment; and (3) develop the ability of specialists to define, systematize, and communicate their assessment strategies and tools to local and national audiences. We worked with 96 visual art, music, dance, and theater specialists and their 48,000 students in grades 3-8 at high-poverty schools in South Brooklyn, New York. The teachers engaged in action research focused on collaborative inquiry into student achievement in the Arts in professional learning communities that brought them together across schools. This article will focus on the visual arts work.

Our first challenge was to convince our collaborators, the arts specialists, of the value of assessment in arts education. Early on, we were politely told that art cannot be assessed, and furthermore, we should not assess children's art because so doing could threaten their self-esteem and diminish their motivation to engage in artmaking. Recognizing in this argument the lack of distinction between assessment and evaluation, we presented theory and research on the distinctions between summative and formative assessment, or assessment *of* learning versus assessment *for* learning (Stiggins, 2006), and stressed the ways in which ongoing, informal feedback from the teacher and from the students themselves can deepen students' understanding of important concepts and skills. We presented evidence that students benefit from three simple things: (1) An understanding of the targets or goals for their learning; (2) knowledge of the gap between those goals and their current state; and (3) knowing how to close the gap through relearning and revision (Sadler, 1989; Black & Wiliam, 1998).

Reconceptualizing assessment as a moment of learning (Zessoules & Gardner, 1991) allowed the teachers to see it in terms of authentic artistic processes such as setting goals, assessing one's own work, and revising—processes that are inherent in any creative endeavor that involves rehearsal and redoing. The teachers turned their attentions to clearly articulating their expectations for their students in order to help them understand the goals for their learning (drawing on the NYC Blueprints for Teaching and Learning in Visual Arts), guiding students in self- and peer-assessment in order to permit them to recognize any gaps in their learning, and encouraging and supporting revision and redoing in order to close the gaps. The results have been inspiring. As the teachers saw improvements in student engagement and the quality of artmaking, they embraced formative assessment. The remainder of this article will introduce two approaches to assessment in visual art classes that reveal the innovative ways in which the teachers implemented formative assessment techniques in their classes.

Jason Rondinelli and Emily Maddy: 7th-Grade Gradation Lesson

Jason Rondinelli and Emily Maddy teach art in IS 223–K, a middle school in Borough Park. They assigned the project described in Table 1.[1] The learning goals for the project included:

- awareness of light, value, and contrast;
- observation of detail;
- use of monochromatic color gradation; and
- understanding of form follows function relationships.

As students worked on their drawings, the teachers noted that many of them needed additional instruction in gradation. After reviewing the concept of gradation and how it can be used in the project, the teachers showed students a purely visual gradation rubric (Figure 1) that they created from other, anonymous students' work, and asked them to use it to write a narrative gradation rubric. In groups, students defined one level of the rubric (4, 3, 2, or 1) by comparing their assigned rubric level to the level above or below it, describing the positive and negative uses of gradation in each of the examples, and listing five or more descriptions about their rubric level. Students were asked to discuss gradation only, not other aspects of the car such as shape, color, design, or use of detail.

Sustainable, Biomorphic Car Project
Goals: You will begin the year by drawing a toy car. By completing this project you will strengthen your observational drawing skills, contour line drawing skills, and your understanding of gradation value studies.
Requirements: The design will be biomorphic, or inspired by shapes found in nature. The car must use a sustainable energy source such as biodiesel, solar, or hydrogen power.
Process: 1. After drawing a toy car, you will design your own car. 2. Write a one-paragraph description of your car and the green technology it uses. 3. Write a slogan which states the best quality of your car. 4. Turn to your neighbor and sell him or her your car. Be sure to read your slogan and discuss the strengths of your car design. 5. Answer these questions: Based on your partners' car design and slogan, what type of person would be interested in buying this car? Would you buy this car? Explain your answer.

Table 1.

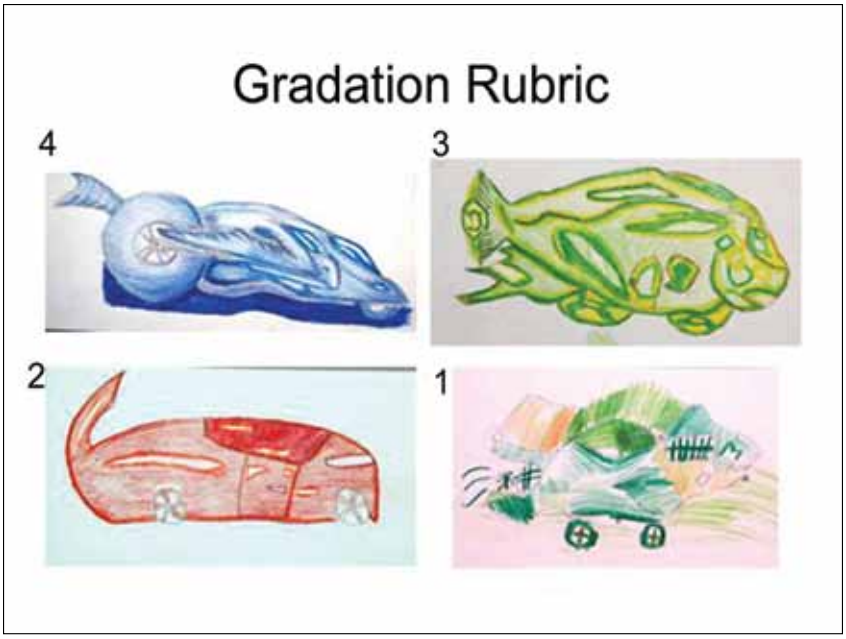


Figure 1.

The results have been inspiring.

There are myriad ways in which assessment can not only measure and document student learning but also—and more importantly—actually promote learning.

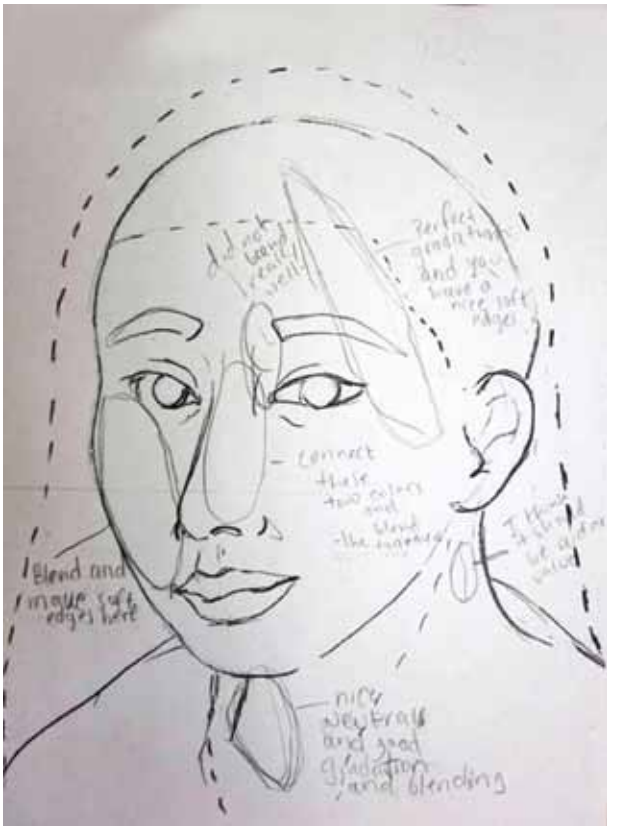
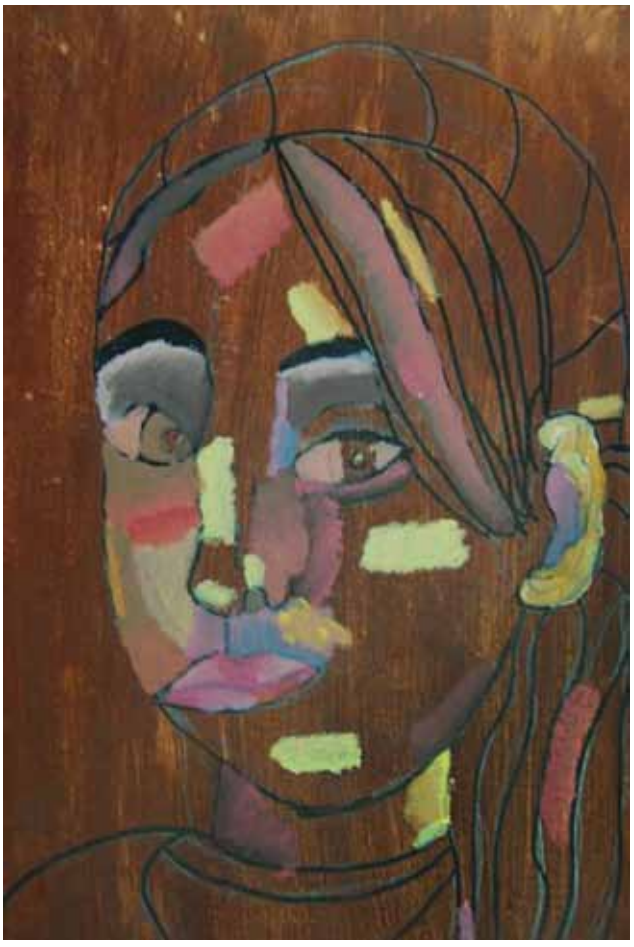


Figure 2.

4 Yes	3 Yes and…	2 No, but…	1 No
+	+	+	+
It has a cast shadow.	It has shine marks.	There is gradation on the bottom of the door.	The rims are shaded darkly.
It has gradation on the bottom.	Artist shows good use of dark and light values.	-	The car looks 3-D.
It has a light source.	The picture shows gradual shades in the car.	The car is outlined.	-
It goes from light to dark very clearly.	He used light values which helped the car the way he used the shadows.	There is no shadow.	The gradation starts wrong.
Light colors blend in with dark.	-	It's not shaded from light to dark.	The wheels are too little.
The way the artist colored the car showed where the light source was coming from.	Needs more gradual value.	There are no details.	Some spots are not well shaded.
-	Give wheels lighter gradation or darker shade.	The windows have no shine marks.	The shadow is not shaded correctly.
It has an outline.	The direction of the light is not perfectly directed.	The wheels do not look 3-D.	
Cast shadow is too dark, Doesn't go from light to dark, Doesn't have enough gradation.	The artists basically outlined the car.		
Outlined some body parts.	He had more dark value than light values.		
Cast shadow is really straight.	The wheels were too light.		

Table 2. Narrative Gradation Rubric.



Figures 3 (left), and 4 (above).

Once the students defined and described their group's level, they combined their ideas into the rubric in Table 2. The teachers then asked them to engage in thoughtful self-assessment of the use of gradation in their drawings of cars by writing their answers to the following questions: (1) Based on the gradation rubric, what is the rubric level of your first car? What will you do to improve the gradation of your car? (2) What rubric level is your second car? What will you do to improve the gradation of this car? After carefully thinking about the quality of their work and ways in which it could be improved, the students revised their drawings using high-quality soft pencils. Finally, after working on their drawings, they did some reflection by writing their responses to these questions: (1) Did you reach your goals? (2) Did you improve the gradation in both cars? Have you reached a higher rubric level?

Noting the success of the processes of co-creating the rubric and of self-assessing, Ms. Maddy and Mr. Rondinelli decided to extend it to peer-assessment of another project. While working on self-portraits, students gave each other feedback on their value scales using the template in Figure 2 and words from a word bank: value, warm and cool colors, neutrals, saturation. After receiving feedback, each artist then reflected on the degree to which he or she agreed with the feedback, planned next steps, and continued to work on the self-portraits. Figures 3 and 4 are examples of how students' mastery of gradation (among other things) improved.

Mr. Rondinelli and Ms. Maddy report that their students were articulate in their discussions and writing, used many words from the word bank, and addressed specific areas of the portraits during the peer-assessment process. Many students improved their work after getting feedback, although of course some chose not to follow the advice given to them by their peers. This decision to disregard some or all of their peers' suggestions was a natural part of the process of artmaking: Feedback is not a mandate, and each artist must make decisions about his or her own work.

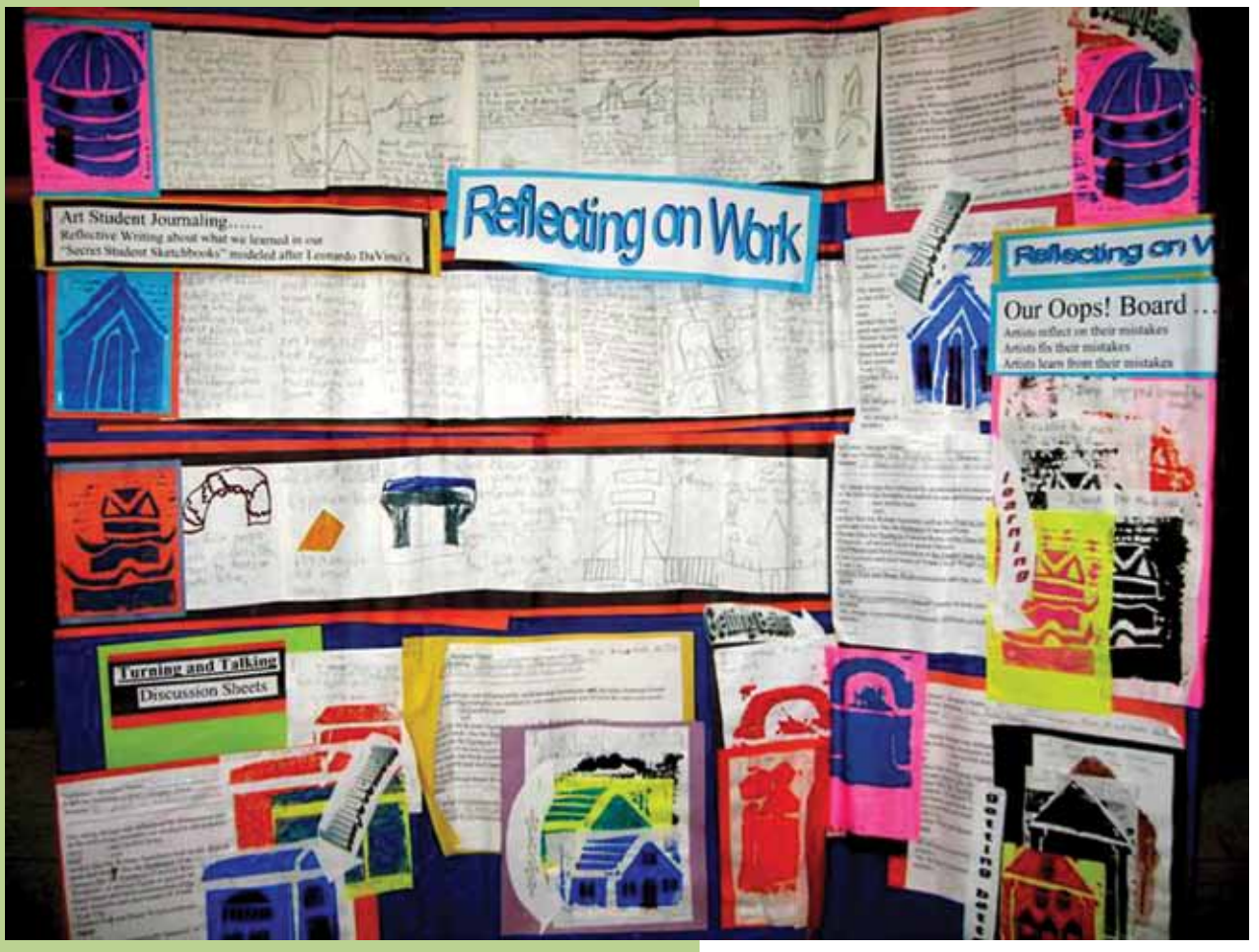


Figure 5.

When students become their own teachers, they exhibit attributes that are most desirable for learners, including self-monitoring, self-assessment, and self-teaching.

Kareen Makowsky: Second-Grade Printmaking Project

Kareen Makowsky teaches art in PS 135, an elementary school. The learning goals for her printmaking project included:

- creating a print that demonstrates basic printmaking techniques such as stamping, rubbing, and collagraphing;
- creating a print that demonstrates textures, colors, and shapes;
- honing observation skills;
- developing the ability to discuss works of art;
- developing visual arts vocabulary;
- developing the ability to reflect on the process of making art;
- recognizing the societal, cultural, and historical significance of art; and
- accessing local resources to extend learning beyond the classroom.

After seeing and discussing architectural icons, prints, and stamps that exemplify how architects' choices impact the balance, texture, and shapes of buildings and houses, students compiled a journal with a collection of architectural icons and features they observed in their own neighborhoods. They then chose shapes to design buildings, beginning with rooflines and walls, with the understanding that they would use their designs to make a stamp.

Before gluing their pieces, students examined stamps and noted how they separated inside shapes and details. They were then asked to turn to a neighbor and inquire, "Do you have any suggestions for how I could show my building's inside shapes? How could I make it more interesting? Can you tell which architectural influences my building had?" The students then made revisions and glued.

After printing a few prints, students shared the problems they had experienced and the ways in which they solved them in discussions with their peers. To emphasize the fact that artists often stop to think and write notes about what didn't work in order to avoid repeating mistakes and to enable them to use a "happy accident," Ms. Makowsky encouraged students to share their prints on an Oops! bulletin board (on the right in Figure 5), stacking new prints on old prints to show their progress. Students eagerly wrote in the margins of their "mistake" prints about why it was an Oops! and how they planned to improve it, then pulled and posted successive prints. Figure 6 is a detail of Figure 5. It shows two students' successive prints and their reflections, including "I used too much ink" and "I learned it was too wet and clogged the lines."

Ms. Makowsky reports that she has never before experienced 2nd graders writing so much and so well. They seemed to like using the Oops! board, and began to make revisions independently. As a result, the Oops! board depicted the improvement in students' prints and their ability to reflect on their work. In addition, students' discussions with their peers led to modifications to their discussion sheets, on which they identified architectural influences in their print designs, revealing their increased awareness and understanding of these influences. Stopping the design process to turn and talk allowed the students to realize how their stamp was seen by others and to make changes to better communicate

Figure 6.

their ideas before they glued down. Stopping to turn and talk about printing problems improved the quality of the prints by focusing their attention on what makes better quality prints and allowed students to see how others solved problems. Ms. Makowsky noticed that students' use of lesson-specific vocabulary increased as well. During the printing process students were more likely to offer advice such as, "Be careful! Too much ink will clog your stamp's lines!" or "Hurry! Ink is drying!"

Conclusion

In a recent meta-analysis of research on learning, Hattie (2009) concluded that the biggest effects on student learning occur when teachers become learners of their own teaching, and when students become their own teachers: When students become their own teachers, they exhibit attributes that are most desirable for learners, including self-monitoring, self-assessing, and self-teaching. One success of the Artful Learning Communities project is that it helped students see how to learn from themselves and each other via self- and peer-assessment, thereby increasing their engagement in and learning about making art. Another success of the project is that it helped teachers learn about the role of assessment in their own teaching. They made seismic shifts in their assessment practices, moving from end-of-unit critiques that mirrored their experiences with studio practice, to ensuring that assessment is informative and ongoing by having students review and talk about their works-in-progress. **Finally, an unintended but welcome consequence of this work is that the teachers have found themselves in new roles in their schools: They have been identified as leaders in instructional practices because of their expertise in assessment and collaborative inquiry.**

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ENDNOTE

1 The presentation of the project to students included illustrative graphics not included here, but are available at http://voicethread.com/share/897970.