CHAPTER 4

Seeing Is Believing

Making Our Learning Through the Arts Visible

Stephanie Violet Juno

Learning, like falling in love or other significant changes that take place in that complex and not fully understood nexus of the mind/heart/body, is for the most part invisible. Like other teachers, teaching artists, and arts teachers, I have struggled with this challenge for years. As an educator, I am focused on my students’ learning, but the transformational process itself is elusive. I know my students don’t understand a concept when they wear a look of confusion or frustration. I know my students understand an idea when their faces glow and they can’t wait to share it. However, those pivotal moments of learning that happen in between understanding and not understanding are often simply not apparent. This chapter describes how this invisible learning manifests in classrooms and shares examples of how you can start making your student learning visible.

In my experience, the challenge of invisible learning most often manifests itself in three ways. The first is the Parent Night Conundrum. This is that special time of the year designated to show parents what students have learned, but—here’s the catch—without actually showing the learning process! Because parent night occurs after school hours when no normal school learning activity takes place, the focus is often on showing what students “have learned” rather than what they “are learning.” Consequently, these events often feature plays or concerts, art exhibits, and bulletin boards of final essays and completed worksheets. Student accomplishment needs to be honored; however, a focus on learning is lost in the face of so much “product.” It also sets the stage for the second manifestation, which I call the Wow Effect.

A common response from a parent about a finished artwork is simply “Wow!” Parents often view the presentation of student work as if it magically appeared full grown like Athena born from the head of Zeus. They exclaim, “Our kids are so talented!” or “I don’t know how you got my kid to do that!” The answer to the implied question is that the children used their brilliant brains and a lot of practice. The awe-inspiring growth a child makes learning through the arts is often rendered...
invisible by the sheer glamour of the finished artwork, play, or concert. As educators, we face an inherent challenge when displaying finished artwork and hoping the entire learning process—which may have involved basic skill development, the challenges of group work, troubleshooting, and revision—might shine through to people who were never in the classroom witnessing it unfold.

However, perhaps most important to an educator is the third issue, that students do not generally, naturally, or effortlessly articulate their learning. They might be able to tell you and their parents if they “liked” acting in a play or “didn’t like” an art project. When asked further about this, they might say it was “fun” or it was “too hard.” When asked more specifically what they learned, they might point to quantifiable things like a particular song they learned to play on the violin or a piece of choreography they know how to dance or they might simply say, “Lots of stuff.”

In the examples above, students are talking about their learning, albeit with a limited vocabulary, which leaves a lot open to interpretation. It is possible that when they say it was “fun,” they mean that they enjoyed the process of being challenged by new ideas and that their eventual mastery of the new concepts gave them a sense of joy. Or when they say it was “too hard,” they might mean that they found it difficult to stay engaged when they became frustrated with repeated attempts to master a new skill with only minimal improvement in their eyes. When they say they did “lots of stuff,” they might be referring to critical thinking, physical, emotional, and life skills development, or they might mean the craft of the arts discipline they explored and the content of the art and subject areas they grasped. However, we will not know what they really mean until we help students build a metacognitive vocabulary to talk in depth about their learning through the arts.

In recent years, some schools in Oakland, California, have addressed these issues by using a strategy called Making Learning Visible. They use this framework to make visible the learning that is taking place every day in the classroom and make it the focus of the school community. Instead of Parent Nights, these schools present “Expositions of Learning.” At these events, instead of bulletin boards consisting of the project title and the finished work, there are displays that document the learning process of an arts-integrated unit step by step, and quotes and reflections on the learning experience from students and teachers. Students, instead of “showing” what they have learned, actively “share” what they have learned in the classroom by teaching their parents and siblings an art process.

**WHAT IS MAKING LEARNING VISIBLE?**

Making Learning Visible is a learning framework developed by researchers at Project Zero at the Harvard Graduate School of Education, working collaboratively with educators at the Reggio Emilia school district in Italy. Project Zero researchers were interested in how the process of documentation at Reggio Emilia schools
Making Our Learning Through the Arts Visible

was crucial to the inquiry-based and group-oriented learning there and how these ideas could be used in U.S. schools. Oakland educators learned about this framework through local forums and projects presented by the Alameda County Office of Education, the Project Zero Summer Institute, and local lectures by visiting Reggio Emilia educators.

WHAT DOES MAKING LEARNING VISIBLE LOOK LIKE?

At a small charter school in Oakland, visual arts teacher Sara Stillman took pictures of her kindergarten students making art and later asked them to describe what they were thinking while they were making the art in the photograph. She transcribed their words under the photograph, and the students signed their names. This simple strategy created an opportunity for her students to develop a metacognitive language for their thinking process and revealed important information that Sara used to assess her student progress.

For example, one of the students described a photograph of herself painting by saying, “I was making squiggly lines. I got the idea to make squiggly lines from up in my head. The lines looked like the legs of an octopus.” As someone who uses the Studio Habits of Mind (Hetland, Winner, Veenema, & Sheridan, 2007) to assess her student learning, Sara can see that her student is “envisioning” an image before she paints it and developing a metacognitive language to describe this skill. Sara can also see that once her student has put her idea on paper, she makes connections between her drawing and other objects in the world. In thought and image, Sara’s student is caught in the act of building, through the practice of art, a very real bridge from her internal, mental world to the external world of physical reality and shared concepts.

By creating moments for her student to reflect on what she is thinking about what she is doing, Sara can track the student’s bridge-building progress even as her pupil walks on the structure. In fact, the act of reflecting could aid students’ bridge-building process, in part because “documentation is not limited to making visible what already exists; it also makes things exist precisely because it makes them visible and therefore possible” (Project Zero/Reggio Children, 2001, p. 17).

Another student described a photograph of himself making a group line painting with other children in this way: “All of the lines are different because they were made by different kids.” Based on his reflection, we can see that he has created a theory for why all the lines on the paper are different, and it speaks to his beginning understanding that each person is capable of unique thoughts and unique ways of expressing them. Not only does he seem to understand each student as an autonomous creator, his neutral statement demonstrates an underlying tolerance for difference. Sara’s student is developing a language about his personal learning as a participant within a learning group. His individual learning is extended by the simultaneous learning of his peers in a group context.
For an educator, these four sentences become a treasure trove of valuable information that helps assess what students are learning in the arts. Sara says, that Making Learning Visible strategies give her “an authentic reflection of that moment in time from my students’ perspective. I find out what they understand and what they are learning.”

These images were displayed in Sara’s classroom year round, not just for the school’s biannual Expositions of Learning. For students, the images reinforce the individual discoveries they have made and their developing metacognitive language. They also become a lexicon of learning, allowing each child to draw on the rich archive of learning by their peers. Because each student’s learning is augmented by the learning of fellow students, Sara is creating a learning environment that can “foster relationships, loans of competencies, expectations, imitation and ‘contagion’” (Project Zero/Reggio Children, 2001, p. 10).

This documentation also allowed Sara to share with the school community what her students were learning through the arts. A visitor could see the classroom in action even if the children were not present or engaged in arts learning. The text accompanying the image is crucial to the viewer’s experience. Without the student voice, it would be tempting to make up our own story about what is happening in the picture. Instead, we read a play-by-play commentary that brings that moment of learning back to life.

Hatt Pierson, the third-grade team teachers at ASCEND School who also appear in Chapter 7, teach at a small school-by-design in Oakland. They create displays that document their arts-integrated units from beginning to end. These large process documentation panels begin as working documents in the classroom to chart students’ day-to-day learning and then are displayed in the hallways for the biannual Exposition of Learning. Similar to Sara Stillman’s pieces, this display includes photos and student quotations, but these elements are imbedded into a step-by-step description of the process, accompanied by examples of the work in progress, so that viewers can see the artwork and the associated learning take shape.

This display functions in multiple ways within the learning community. First, it serves as a working tool in the classroom. While constructing it, the students practice the vocabulary of the unit as they reflect on what they are learning.

Second, parents have an opportunity to see not only the finished work of the students but also each step of the multi-tiered project that involved drawing, expository writing, social studies, and musical composition. This display lays bare the rigorous learning process their children traversed, illuminates the complex intersections between the integrated subject areas, and provides a crash course on the content and skills involved so that parents can discuss the work with their children.

Third, the panels remake the school hallways into a text describing the collective story of learning. Instead of presenting disconnected artifacts of finished and
unrelated work from different classrooms and different subjects, this community story of learning is an inviting, ongoing, and developmental process. I have seen students in younger grades excitedly point out older siblings’ work on the hallway walls to friends, who then stay as a group to read the road map of what they will likely do themselves when they progress to that next grade. Reciprocally, the public story provides an opportunity for older students to recognize the spiral relationships between the learning at different grade levels within the same subject area and to place themselves within this progressive story.

Fourth, the panels serve as a professional development tool. During the faculty meeting following the Exposition of Learning, teachers view the Making Learning Visible panels. They use a protocol that allows them to explore as a group what evidence of learning they see in the panel and to ask questions about the content and form of the display. Teachers new to Making Learning Visible experience firsthand how a teacher can use a documentation panel to communicate and assess the learning taking place in the classroom. For Hatti and Opus, it is an opportunity to hear their colleagues’ feedback about their curriculum, collect suggestions from their peers, and explore the questions and new ideas generated by the conversation as they continue to refine their unit.

Inspired by the class displays at ASCEND School, Davina Katz Goldwasser, a seventh-grade teacher there, used Making Learning Visible on an individual student basis. She asked students to document their learning process during an immigration unit that included a play and to reflect on how they felt they learned best. Students created their own panels to make visible their own personal learning path through the immigration unit. One student depicted the path as a chronological and linear storyboard. Another depicted it as a radiating explosion from a central
idea. The project provided Davina and viewers with a map for how students experienced the learning process and how they visualized it.

Reading the displays, a viewer could see how Davina's students were making connections to the material. While some students expressed amazement at historical information on immigration, others noted how the information dovetailed with migration stories told by parents. Although the displays focused on "how" students learned, the panels were also rich with information about "what" they learned, providing information about what knowledge they were most interested in or proud of learning.

The unit itself incorporated many pedagogical tools, including the study of books, lectures, group discussion, enactment of a historical play, and written reports. Despite the stereotype of lectures as "boring" and an outdated teaching mode, a large number of students noted that they learned best during lecture when they were able to listen and take notes. The displays also provided information about the arts-integrated component of the unit and created an opportunity to see how the students felt about the play they acted out and what they felt they learned in the process.

As these three examples across different grade levels, art forms, classroom situations, and academic disciplines illustrate, Making Learning Visible is effective in a variety of classrooms. Because Making Learning Visible is focused on the act of learning rather than on what is being learned, it can be used with a wide range of students and subject matter with success.

Figure 4.2. Detail from Making Learning Visible classroom display.
FIRST STEPS TO MAKING YOUR STUDENT LEARNING VISIBLE

Some of these examples might be inspiring to you, but they also might seem a lot to undertake in your classroom or not appropriate, given your context. Or perhaps you don’t know where to begin. If that is the case, try one of the following projects. Each should take about 15 minutes with materials you already have in your classroom. These ideas are presented as a sequence, but they can be tried individually as well.

1. **Collect artifacts of the process, not just the final product.** While finishing up a lesson, ask your students to choose an artifact that would best document an aspect of their learning that day. Maybe it is a paper plate paint palette, a draft of a script, a score with revisions on it, or a permission slip for a field trip to a museum. Ask students to write a brief caption describing how the artifact reflects their learning that day.

2. **Guide a short reflective conversation with your students about their learning.** Plan to take the time to stop the action in the classroom for the class to reflect. If you try this at the beginning of a lesson, you might ask students to reflect on the previous lesson and what they are most proud of learning thus far. If it is at the end of a lesson, you might ask your students when they felt challenged and what helped them overcome that challenge. Or if they could send themselves through a time machine to the day they started this project, what helpful understanding would they share with themselves? In other words, what do they understand now that they did not when they started?

   When you have a reflective conversation with your students, it might be helpful to remember that students are used to being asked questions that have finite answers. A reflective conversation is quite different in that it encourages introspection and invites discussion of ideas that are unique to each student in the room. Let them know that there are no right or wrong answers to the questions you pose and underscore this with your responses. Also, keep in mind that the concept of “learning” is not easy for children. They know they are supposed to be doing “it,” but the “it” is abstract and murky. This is partly because children are learning—taking in large amounts of new information, synthesizing it, and utilizing it—almost every waking minute.

   Getting at the “learning” you are focusing on requires specific prompts to set the frame and a willingness to try follow-up questions if the first ones elicit answers that parrot your questions or reference whether they “liked it” or not. It might be helpful to students to scaffold the use of a metacognitive language while the learning is taking place. For example, you might say, “I see you are working together to think through your options and make a decision together.” Or you might point out: “I notice many students are taking their time and contemplating how to draw
what they envision in their mind." Having introduced these ideas in action, you
may refer to these experiential examples later in your reflective conversation.

If a metacognitive vocabulary is new to your students, the first reflective
conversation might be to build an age-appropriate thinking-word list to post in
the classroom. For each word, ask students to give an example of how they expe-
rrienced it that day. The list might include analyze, assume, brainstorm, choose,
concentrate, consider, contemplate, find similarities or differences, focus, guess,
imagine, interpret, make decisions, plan, question, recognize, reflect, revise, see
relationships, synthesize, think, and understand.

3. Take time to reflect on your student learning. What stood out for you as
a noteworthy moment today? Did you see a student have an Ahah moment? Did
you notice a dynamic shift between students? Did the class as a whole take another
step in an ongoing effort to master a skill or engage with an idea? Did you or your
students encounter an unexpected challenge? What are your thoughts and ques-
tions about this?

Whether it is a moment of quiet reflection, an opportunity to jot down your
thoughts on a scrap of paper, or a conversation with a fellow educator, take the
time to reflect on the learning that is taking place in your classroom. Sometimes
it is hard for us to take the time to reflect with so much competition for our time
in the classroom. Remember, however, that you are the only person in the entire
world of over 6 billion people who witnessed what you saw happen in your class-
room. Your perspective as the teacher allows you a special vantage point that is
critical to express, and simply by thinking it over, you move the learning in your
classroom forward.

NEXT STEPS TO MAKING YOUR STUDENT LEARNING VISIBLE

If you have tried the first steps and are excited about continuing, here are some
next steps to make your students' learning visible, directed to a specific purpose.

1. Create a question that can guide the reflective process. A question helps
create a frame for the kind of learning you want to investigate and make visible. A
good place to start is with questions for which "the answers are not obvious" and
that "open up multiple points of view" (CAPE, 2007, p. 2).

I suggest focusing on a "burning question"—a question you have a strong
desire to explore and understand. One burning question I have is, "What do my
students think they are learning through the arts?" In the classroom, I ask, "What
do we understand now that we didn't before we started?" This question creates an
opportunity for students to reflect on their learning and how their understanding
has changed during the project. It is a challenging question yet broad enough to
capture perspectives across the spectrum. It is an opportunity not only for my
students to share with me, but for me to share with them what I have learned. It is also a question that can be asked of our audience when we present our learning and our artwork.

2. Choose an upcoming opportunity to make your student learning visible. You might make your student learning visible as part of your everyday classroom practice, or part of a traditional public event, such as a Parent Night, exhibition, or concert. Or you might take advantage of a school newsletter, parent letter, Web site, bulletin board, or faculty meeting as a way to share. Most educators are already committed to communicating with the school community, so capitalize on what is already available to you. However, if your student learning lends itself to a new avenue or event, create the sharing opportunity that would be best.

3. Choose a form for your Making Learning Visible. The examples in this chapter are displays; there are many other options, including scrapbooks, slide shows, or blogs. Or students could keep individual or group journals with each page documenting questions they have and discoveries they make. A more experiential option could involve students interviewing each other about what they discovered and then sharing what they learned from their partners with the class.

For public events featuring finished artwork, there are many ways to share your student learning. For example, in place of actor biographies, student reflections about what they learned during the process could be included in a program. At a performing arts showcase, students could perform poetry about their learning as interludes between longer pieces. At a mural dedication that honors the gift from the student artists to the school, students could also share the gift of learning they experienced while creating the mural. For more ideas, check out the Making Learning Visible Toolkit online (Alameda County Office of Education, no date). Whatever form you choose, remember that it is an opportunity for you as the emcee to share with your community what you feel is most important about what your students learned.

4. Keep the focus on learning. As you and your students work together to make their learning visible, continually check in about how the learning itself and not simply the activities of the classroom are being made visible. Students recounting the steps of the process of how they made a mural versus students recounting their thinking and how it changed over the course of making a mural are two related yet different stories. Key questions to keep in mind are, What do my students think about what they are doing and learning, and What do I think about what my students are learning?

Engage with the Making Learning Visible piece again and again with your students. Treat it as a work in progress and use it as a way to continue a reflective conversation with students. Don’t be surprised if each time you engage with it, you and your students discover that some significant aspect of their learning is missing.
from the story. This discovery is a sign that the Making Learning Visible process is working. It is doing its job of bringing to light the multiple facets of learning so that you can work together to figure out how best to share them.

5. **Find a Making Learning Visible partner.** Introduce a like-minded colleague to these ideas and invite him or her to try Making Learning Visible with his or her students. Together you will be able to brainstorm with a shared knowledge of your context. You will have a ready listener with whom to share your teacher reflections. You will be able to consult with each other during the process and give each other feedback on results in the classroom. Making Learning Visible shifts the focus from product to process, from logistics to learning, and from doing to reflecting; having a partner at your side while you traverse this exciting territory will be very helpful.

**IS IT WORKING?**

As you engage with the Making Learning Visible process, you might wonder, *How do I know if this is working?* Ask yourself the following questions. The answers will help sharpen the focus of your investigation into learning to yield the most helpful information to you and your students.

**What Did I Learn About**
- Individual students and their learning processes or my class as a learning community?
- My lesson plan or the subject matter/discipline we are learning about?
- The process of learning through the arts?
- The question or idea that inspired the Making Learning Visible piece?

**Did My Students Have an Opportunity to**
- Engage with their individual or group learning process?
- Develop a vocabulary for metacognitive thinking and what it means to them?
- Reflect thoughtfully on their learning experience and express their feelings, discoveries, and questions to their learning community?
- Hear about and engage with the learning process of their peers?
- Value their own learning as much as their completed work?
- Affect the learning culture in the classroom?

**What Did Viewers of Our Making Learning Visible Project Learn About**
- Individual students or the class and their learning experience?
- The subject matter or discipline we are learning about?
Making Our Learning Through the Arts Visible

- The process of learning through the arts?
- The question or idea that inspired the Making Learning Visible piece?

This type of reflection will help draw out what steps you might take next with the Making Learning Visible process and with your teaching.

THE BEAUTY OF MAKING LEARNING VISIBLE

Making Learning Visible can be effective at every age level in every arts discipline and academic subject matter, and for each member of the learning community in multiple ways. The beauty of Making Learning Visible is that it simply takes the learning that is happening in the classroom and makes it accessible. Once it is made available to everyone, it enhances the experience for both students and teachers. It demonstrates that everyone's ideas are important and encourages students to take pride in what they are learning.

Making Learning Visible is a perfect strategy for my vision of the ideal Parent Night. It would actually be Parent Day—it would happen during the school day—and nothing unusual would be arranged. Parents would be invited to join the class and participate, to the degree they feel comfortable, in the real learning that happens every day in the classroom. Parents would watch and listen to the ongoing metacognitive conversation between teacher and students about the learning taking place before them. Students would guide their parents through displays and experiences to share their learning further. As their children move through the grades and encounter different arts disciplines, parents alongside their children would develop a sophisticated language to express the learning process. Ultimately, everyone would have a common language to honor the students and what they have learned.

REFERENCES


