



Figure 1. "People destroying themselves and the things around them." 12 x 18 inches. Artwork by Renaissance.¹

Personal Perspectives on CONSTRUCTIVISM in a High School Art Class

BY JAMES FRANCIS HESSER

I decided to be a high school art teacher when I realized the importance artmaking had for me as a teenager and the key role it played in my development as an individual.

I have always hoped my teaching would help students discover the value and power of artmaking so they could put it to use in their lives. Recently I gave my students a survey about a painting unit we had just completed. Reflecting on the unit, one student, Renaissance,² wrote, "I was ... able to discover what kind of artist I am." Another student wrote, "I know what I want to do from the project and that is to go to an art school and become something using art ..."

Normally these comments would have aroused my interest, lifted my spirits, and even renewed my faith in my profession; but **I was especially intrigued, since this unit was the crux of a qualitative case study** I was conducting on constructivist learning.

Each year, before students leave, I make a

point to get their feedback on their experiences in my classes. The previous year, several comments on end-of-the-year surveys revealed that students did not feel they had enough opportunity to "draw what [they] wanted." These responses made me rethink my classroom. Students

seemed to prefer the projects that gave them the most creative control. So, why not give it to them? My research explored what happened when I did.

The purpose of this article is to draw attention to the power of shared responsibility in the secondary art classroom. While the conceptual framework I used is grounded in constructivism, readers may also find intersections with other instructional approaches, especially those that value student-centered learning over academic or quantitative political agendas.

History, Theory, and Practice of Constructivism

Educational theorists have argued for developing intrinsically engaging, socially relevant curricula for over a century. During the late 19th and early 20th centuries, John Dewey and the *progressivists* gained public acceptance for the idea that students were capable of more than just receiving, storing, and reciting information. Further, Dewey helped reform American education under the premise that students learn best when engaged in activities that reflect their interests and experiences (Foote, Vermette, & Battaglia, 2001; Marlowe & Page, 2005).

Cognitive psychologists such as Piaget and Vygotsky developed learning theories that support Dewey's philosophical premise. Piaget clarified the need for context in learning, theorizing that learning follows cognitive development and is based on experience that challenges concepts understood from prior experience (Foote, et al., 2001; Marlowe & Page, 2005; Piaget & Inhelder, 1966/2000). Like Piaget, Vygotsky (1978) linked learning to challenging prior experience, but believed that learning drives, rather than follows, cognitive development. Vygotsky also added a key ingredient to the mix: social interaction. Vygotsky described learning as a social process in which knowledge is constructed through interaction with a knowledgeable mentor and one's peers. These ideas form the foundation of social constructivism.³

The surveys indicated that most students made art to express their feelings, interests, or experiences and found painting especially expressive, but did not have much opportunity to paint.

Constructivism bears many similarities to *holism* and *critical pedagogy*. All three educational orientations strive for greater student ownership of the learning process. Peter London (2006) and the holists use more esoteric language in their emphasis on teachers framing open-ended problems that "spiritually" or "artfully" engage students' bodies, minds, and spirits. Yet, nearly identical ambitions are part of the more utilitarian writing of Vygotsky and the constructivists. Critical education has roots in constructivism but places greater emphasis on socio-political power dynamics (Shor, 1999). A shared focus on practices that are relevant to students' lives, invite student participation, assure student control of the learning process, and promote *facilitators* rather than teachers underlines similarities creating a near-symmetry among the theories.

To become a constructivist teacher, one needs to rethink the teacher's role in the classroom (Grennon Brooks & Brooks, 1993). A constructivist teacher is more of a facilitator than an instructor, guiding students to appropriate information with which they may develop answers to their questions themselves. A constructivist classroom should be a place where knowledge is not transmitted from teacher to student, but *constructed* through the cooperative efforts of teachers and students together. Although there is no single model for constructivist learning, a facilitator should provide a structure that encourages students to assume three roles: (1) the active learner, by engaging students in the design of their learning criteria, assessment, and learning process; (2) the creative learner, by allowing for multiple solutions to open-ended problems and viewing errors as learning opportunities; and (3) the social learner, by providing multiple opportunities for dialog, discussion, investigation, and collaboration with and among students (Milbrandt, Felts, Richards, & Abghari, 2004).

Constructivist teaching is most associated with preschool settings in places such as Reggio Emilia, Italy (Edwards & Forman, 1993), where easy interaction between students and teachers in creative, engaging environments is commonplace. Constructivist teaching approaches become less and less common as students age and the curriculum becomes more test-bound. However, many researchers believe constructivist classrooms are the richest of learning environments, regardless of a student's age (Foote et al., 2001; Fosnot, 1996; Grennon Brooks & Brooks, 1993; Marlowe & Page, 2005; Milbrandt, et al., 2004). Other educators and researchers call for more student input and control in the art room, but do not necessarily characterize their approaches as constructivism (James, 2000; Jeffers, 1997; McKenna, 2006; Reynolds, 2004; Zander, 2003). Pitri (2006) believes it is both necessary and natural for art teachers to conduct qualitative research on constructivism, because the flexible nature of qualitative research reflects socio-constructivist principles and offers uniquely rich opportunities for deeper understanding of the cognitive processes taking place in the art room.

Getting Started

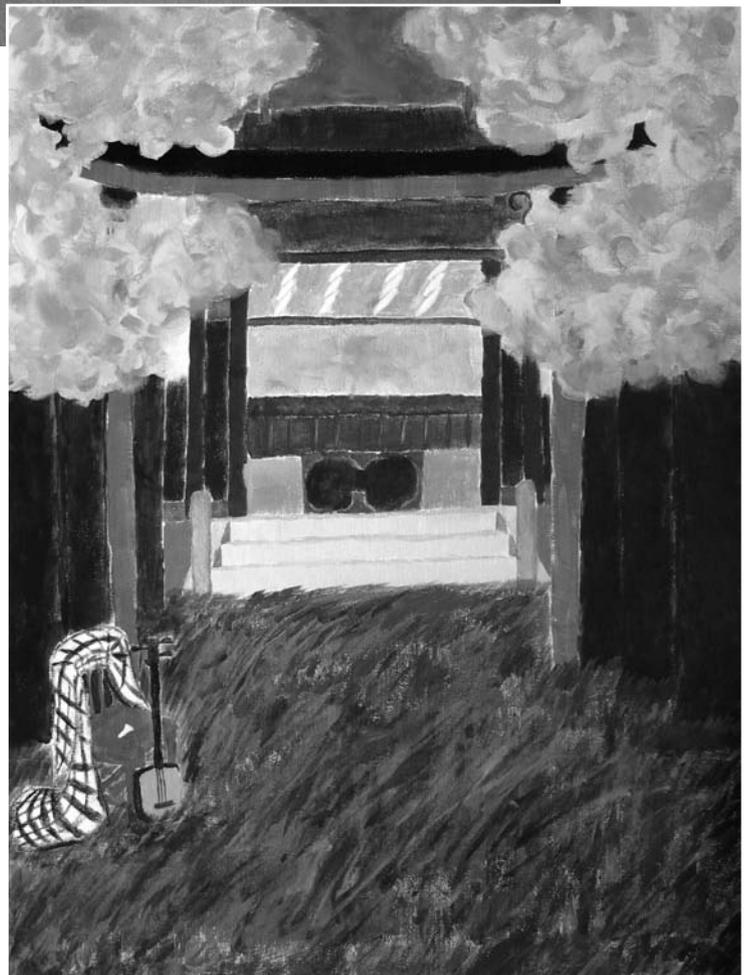
My case study took place in a mid-Atlantic suburban high school, with a very social, level-two, elective studio art class of 32 students in grades 10-12, from a wide range of socio-economic, ethnic, and academic backgrounds. I selected this class because I believed students who chose to take a second art class would be more motivated to participate in my study.

I began by surveying students on their artistic preferences and motivations. The survey asked three questions: (1) Why do you make art? (2) What do you want to make art about? and (3) What do you use to make art? The surveys indicated that most students made art to express their feelings, interests, or experiences and found painting especially expressive, but did not have much opportunity to paint. In class we had already explored observational painting in tempera, charcoal drawing, compositional formats, and cubism. I decided a unit on expressive content in painting would revisit and build on many



Figure 2. "Transformation of culture with personal experience, expression, and imagination." 18 x 12 inches. Student artwork.⁴

Figure 3. "Diverse cultural backgrounds and how they can unify into one complete work." 18 x 24 inches. Student artwork.⁵



of the skills students develop and provide an opportunity for students to work with a new painting medium. I created a skeletal constructivist-inspired unit structure that began by exploring thematic content in *vanitas* paintings, self-portraits, and dramatic paintings by David Bailly, Antonio de Pereda, Balthasar van der Ast, Frida Kahlo, Theodore Géricault, and Salvator Rosa. Using collaborative and individual work, students composed and completed individual acrylic paintings of varying dimensions that explored themes and ideas of personal interest. Students were required to include at least one object rendered from observation in their paintings. In the process, students built skills in color theory, composition, acrylic painting technique, and the construction of visual metaphors.

As the unit began, I was immediately confronted with the difficulty of classroom management, one of the most consistent criticisms of constructivist teaching. It is easy to see why people might think that student control could lead to chaos. In the very first session, I made a note to myself that much of the class discussion about thematic content in paintings felt "nuts"... but in a good way. Nearly all of the students wanted to contribute their ideas of what the paintings meant—all at the same time. As the unit

Critical, higher level thinking is inherent in effective artmaking, and constructivist frameworks can create increased opportunities for this to occur.

progressed, I adjusted my strategies. Students began to lead, as well as participate in class discussions. By the time students worked in groups of three and planned the content and composition of their paintings, they had taken on greater responsibility for their learning and behavior.

Groups chose themes including: "People destroying themselves and the things around them" (see Figure 1), "Transformation of culture with personal experience, expression, and imagination" (see Figure 2), "Tragic emotion," "Life goes by too fast," "Diverse cultural backgrounds and how they can unify into one complete work" (see Figure 3), "Making inanimate objects come to life," "iPods or any mp3 players in place of everyday objects in city life" (see Figure 4), and "Amazing people in city life" (see Figure 5). During the course of the unit, students made significant discoveries about themselves, how they work, how they think, how their peers think, and how to be a good leader. Several students brought objects from outside of class to incorporate into their paintings, or asked special permission to complete part of the work at home to work with valuable objects.⁵

One student visited his mother's house to draw a Greek table he considered using in his painting, borrowed a miniature column from the social studies department, and brought in traditional Greek music to listen to while painting. His group explored "Diverse cultural backgrounds and how they can unify into one complete work." Their triptych linked Greek, Japanese, and Scottish themes.

Facilitating

Throughout the unit I was constantly reminded that "[a]t the heart of the constructivist approach ... is the understanding that students control their own learning" (Milbrandt et al., 2004, p. 20). Vygotsky (1978) believed that students' learning is dependent on their zone of proximal development, or the ability to solve problems just beyond their actual developmental level under the guidance of a more knowledgeable adult or mentor. Though it was not always their first instinct, I frequently observed students pushing each other beyond their zones of proximal development. For example, in one brainstorming session, Penguin wanted to know, "What's it called when you take something not alive and make it seem alive?" I suggested he ask the class. Students responded, "That's like surrealism." "It's like personification." Several students (including Penguin) offered "yeahs" of approval, and the class moved on.

Many other opportunities arose when students began painting. Constructivist theory claims that learning should revisit prior learning experiences and build on prior knowledge (Forman, 1996). All students had experience with painting prior to this unit, but most had a limited understanding of color theory and painting techniques. Additionally, we worked with acrylic paint, a medium new to most of the class. I briefly demonstrated how to set up an acrylic palette for the students who were ready to paint, and then those students helped their classmates set up their palettes more efficiently than in previous years, when I had been the sole monitor.

Figure 4. "iPods or any mp3 players in place of everyday objects in city life."
18 x 12 inches.
Artwork by Snow White.⁶





Figure 5. "Amazing people in city life." Artwork by Bean.⁷

When groups dispersed into their own spaces, I worried that the collaboration would subside.

Sometimes they just needed a little nudging. One student begged me to "just give me black paint," because she couldn't figure out how to mix a dark neutral, and I encouraged her to see if her classmates could help. She did. One offered, "I don't know, you mix analogous or complements?" Another chimed in, "Isn't it like red and green, blue and orange?" To which the first student responded, "What do you get when you mix blue and orange, BROWN?" She was on the right path and soon figured it out.

As a facilitator, I led students to sources or practices that would help them learn; sometimes that source was another student, but many times it was not. We spent two sessions in the library, researching ideas, art movements, and source images. As the unit continued, I always thought on my feet, getting a skeleton or a skull for some, a kimono for another. I demonstrated linear perspective for a student who couldn't make a pizza platter "lay down." Most of the time only a little nudge was needed, and students made leaps and learned for themselves—not just about art.

Questionable learning outcomes and the abandonment of curricular standards are among the criticisms of constructivism (Foote, et al., 2001). Yet this unit allowed students to learn about art movements, literary devices, color theory, anatomy, drawing and painting techniques, world cultures, and other subjects crucial to a thorough art education. Critical, higher level thinking is inherent in effective artmaking, and constructivist frameworks can create increased opportunities for this to occur.

One participant, Snow White, was a member of the "iPod city" group. This group was unique, as two groups combined to compensate for absences, allowing the students in attendance to keep moving through the planning stages. Because she was highly motivated, Snow White became the group's *defacto* leader. She approached me after class, because she felt the group was putting too much of the work load on her. I met with the group and offered them two options: split into two groups or remain together with everyone contributing. They chose to stay together, and their work improved but remained somewhat divided.

In an interview after the unit was completed, Snow White revealed an amazing insight. She explained how subdivisions in her group seemed to subconsciously manifest in the students' artwork. The settings of their paintings, whether inside the iPod city the group had created or outside of it, reflected each student's level of involvement in the group's planning process. She explains: "Yeah the outskirts of the city were the people who ... didn't ... really have that much input. The people who placed themselves inside the city were the people who really cared, and wanted something to do."

Assessing

Constructivist theory calls for students to be involved in all stages of the learning process, from planning to assessment (Hochtritt, Lane, & Bell Price, 2004; Milbrandt et al., 2004; Prater, 2001). Teachers as facilitators also assess, but mostly to help students assess themselves and contribute to the establishment of criteria and processes for assessment. In preparation for interim reports, I conducted individual conferences with all of the students and had them propose and defend progress grades for themselves. These interviews were, as critics might suggest, time consuming, but they were illuminating. Most students were unflinchingly honest and hard on themselves. It became clear that students set high standards for themselves. Based on the grades they gave themselves, many felt they fell short. I admit I expected a lot of swagger and inflation, but I received almost none. Students were refreshingly self-aware, and most made sincerely reasoned self-assessments. Few gave themselves an A; all but one of those deserved the A. Bs were the most common. There were a few Cs and several Ds.

"I knew what was going on, but didn't really help out," a student offered as justification for giving himself a D. I could not have put it better myself. Another justified a C because he had not brought something in that the group required, "because it's my responsibility to bring in the sticks and I haven't done it." No students gave themselves an E, our school's equivalent of an F. Maybe they were afraid I would agree with them, but I cannot think of anyone who deserved a failing grade.

Reflecting

This article began with two positive student reflections on the unit, yet generally the unit met with mixed reviews. Ziggy, my most consistent critic, said, "It was probably difficult for a lot of people because it was something very new. Just working with other people was ... just a new concept in ... art classes." Penguin said at first, "I didn't like that you didn't help us that much." Later he clarified: "I think ... once I finished the project, I understood what you were doing ... and I kinda liked that you left us independent 'cause it showed what we can actually do on our own." Penguin claimed that the collaborative learning unit made him think about pursuing a career in art. Bean, a student concurrently enrolled in AP classes, said of his artwork, "I thought I'd be doing more serious stuff in like AP, but I'm gonna use this for my portfolio... I'm really proud of it." He described how he took a new approach to artmaking during the unit, as he experimented with a "type of style" using broader brushstrokes, a more deliberate composition, and inclusion of a realistic self-portrait. Ziggy, who had an especially hard time being creative in a group setting and never seemed to fully get into the unit, lamented the large size of the class, saying:

If it's a smaller class, you can really ... get to know the students better. I'm sure the students will get to know the other students better in a way. So they can collaborate and, you know, kind of become friends in a way and understand the painting that they want to do and be excited about it.

He added at the end of his interview, "I think it was a really good idea ... I mean, it's something that [the teacher] just can't get right the first time."

Looking Ahead

I am inclined to agree with Ziggy. The unit was not universally successful, but I am convinced constructivism is worth pursuing. Despite its imperfections, this unit clearly challenged the majority of my students. Many produced inspired artwork that demanded improved painting skills and the development of new ways to communicate their ideas. It even led two students to come to realizations about "what I want to do" and "what kind of artist I am." I believe many of the stumbling blocks, even class size, could be better managed as teachers and students gain more experience with constructivism. Earlier individual progress tracking would help target students who are frustrated with the process. Exploring different methods of collaborative assessment, especially in large classes, and different ways to balance independence and collaboration in creative processes, would be helpful. I foresee many variations of, and modifications to, this unit in the future. Traditional lessons and units evolve over time through trial and error. This process is even more crucial for constructivist planning. Constructivist learning is a dynamic process that must be skillfully facilitated. Facilitating learning requires sensitivity and flexibility. It is not something teachers and students will become adept at overnight; but it is worth the effort.

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ENDNOTES

¹ Renaissance explained the motivations for her painting like this: "A lot of people listen to rap music and stuff. And I do, too, because I do dance, and so I understand what type of music is out there and my parents have always told me, you know, watch what you listen to because eventually you'll end up, you know, actin' out what you listen to. And it's clearly displayed in school, how students disrespect teachers or how guys disrespect girls. So I really understood, like you know, where I wanted to go with this..." Renaissance said that the organs in the painting represent how people listen to music. Explaining the eye in the bottom right corner, she said, "Your eyes have a lot to do with it. I think, you know that with the things that you see on videos or ... what you see other people doin'—how they respond to music or whatever—'cause I see it on a daily basis so ... I mean I think your eyes have a lot to do with it, as well." She also explained how she got the idea for gluing a piece of wire around the mannequin's neck in her painting from a friend's sister's artwork.

² All students are identified by aliases.

³ Applefield, Huber, & Moallem, (2000/2001) discuss three distinct types of constructivism. The first—exogenous constructivism—is rooted in the realist idea that there is an external reality that individuals gradually re-create internally by processing experience. The second—endogenous constructivism, also known as cognitive constructivism—primarily reflects Piaget's ideas of the individual creating and modifying schemata to assimilate and/or accommodate new experiences that may or may not have a social context. The third—dialectical constructivism—is synonymous with Vygotsky's social version (Applefield et al., 2000/2001, p. 37-38).

In addressing the perceived conflict between social and cognitive constructivism, Fosnot (1996) writes, "The important question to be asked is not whether the cognizing individual or the culture should be given priority in an analysis of learning, but what the interplay is" (p. 23). Fosnot's "Unitarian" method of thinking posits that the micro-dissection and labeling of educational theories serves little practical use to educators. Neither constructivism, nor any other educational "ism," wields a monopoly on the cognitive foundations of learning.

⁴ The artist wrote that the painting in Figure 2 is "showing the transformation of Indian culture to American, which ties a lot to my life and how I am blending into with the Americans." She took the painting home to draw the bracelet, because she felt it was too valuable to bring to school, but important to include in her painting.

⁵ The artist wrote about her working process: "I tried putting different points of focus together even though they would not usually be seen together. In my paintings I like to show my strokes + blend colors together..." Her group used scenery from places important to cultures that interested them, along with indigenous musical instruments. This artist also chose to include a kimono I had in the classroom and a classroom chair. These were rendered from observation; the koto pictured on the chair was drawn from a photograph.

⁶ Snow White explained her painting: "I left people faceless, because I wanted it to focus on the iPods and not the facial features of people. I thought it'd be cool to have a restaurant in looking out to the city, so you could see the environment, too, that went along with the restaurant. So it's not ... like ... there's just an iPod restaurant, this takes place in an iPod city, too ... and I just wanted to incorporate that." Reflecting on the process, she added, "I mean I definitely can plan a painting out better than I could before. And I know how to work with people a little better, I mean not just in art class, but outside art class, too. It just gave me a different outlook on more than just my artwork, too ... like, just how I talk with people."

⁷ Bean described his working process: "I started off doing the self-portrait at the bottom. I didn't like how it was turning out, so I just started doin' the city, and ... I really liked how it turned out, so I kept that, and I whited out the face, and I re-did it, and I thought it was ... really good." He explained that he chose a cityscape, because "I'm always downtown ... you know so I guess it's a sort of, like, an influence on my art." He felt the positioning of his head was "creepy" and reflected how the city can be, "like sketchy." Reds and greens were chosen for the buildings, because "they were colors you wouldn't normally see in a cityscape."