

National Art Education Association

A Service-Learning Approach to Teaching Computer Graphics

Author(s): Karen Hutzell

Source: *Art Education*, Vol. 60, No. 1 (Jan., 2007), pp. 33-38

Published by: [National Art Education Association](#)

Stable URL: <http://www.jstor.org/stable/27696190>

Accessed: 01/04/2013 13:05

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at
<http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



National Art Education Association is collaborating with JSTOR to digitize, preserve and extend access to *Art Education*.

<http://www.jstor.org>



A Service-Learning Approach to Teaching Computer Graphics

I taught a computer graphics course through a service-learning framework to undergraduate and graduate students in the spring of 2003 at Florida State University. The students in this course participated in learning a software program along with youths from a neighboring, low-income, primarily African-American community. Together, they learned the Adobe® Photoshop® computer program and collaboratively created a personal collage of images that were meaningful to both the FSU students and the neighborhood youths. Building on the potential for computer graphics to create collaborations among students, service-learning may be a useful strategy to enhance the development of these collaborations by connecting students to the local community to learn from the resources and work with the local residents. In this article, I present this as an example of cooperative imaging as a form of service-learning through the construction of community.

BY KAREN HUTZEL

Figure 1. An example of a collage demonstrating an interest in fashion of the FACE youth.

Community Connections Through Service-Learning

The connection of art education to local and global communities has been explored as community-based art education (Bastos, 2002; Ulbricht, 2005), community-based art (Adejumo, 2000), community art (Hutzel & Cerulean, 2003; Congdon, 2004; Bastos & Hutzel, 2004), and, most recently, as the art for life paradigm (Anderson & Milbrandt, 2005). A common factor of these community-based educational approaches is a democratic educational methodology to link students with community knowledge and experiences, thus constructing community. Service-learning

through art education can similarly connect students to community resources for education (Taylor, 2002) and change. While there are many definitions of service-learning, Community Works Press (2001) provided the following: "Service-learning is a strategy that combines service to the community with student learning in a way that improves both the students and the community" (p. ix). Engaging students in service-learning in art education curriculum can develop in them a sense of place in the community (Taylor, 2004) and can reinforce their learning of the subject matter.

Service-learning has recently received greater attention and has been explored as a form of experiential education based on ideological educational theories of both John Dewey and Paulo Freire (Deans, 1999). Dewey's (1938) concept of experiential learning emphasized real life experiences as necessary to providing meaningful education. Freire (1993) presented a critical pedagogy based on his work in Brazil training individuals to read and teach reading skills, thus empowering individuals to seek liberation and change through education. As such, service-learning as an experiential and critical educational approach is based on the notion of reciprocal learning, which benefits both those receiving and those providing the services (Sigmon, 1979).

As a reciprocal learning experience, it can be argued that service-learning is rooted in democratic education, which hooks (2003) described as learning that "is never confined solely to an institutionalized classroom" (p. 41). hooks described the democratic educator as a teacher who consistently connects learning to students' lives.

Rather than embodying the conventional false assumption that the university setting is not the "real world" and teaching accordingly, the democratic educator breaks through the false construction of the corporate university as set apart from our real world experience, and our real life. Embracing the concept of a democratic education we see teaching and learning as taking place constantly. We share the knowledge gleaned in classrooms beyond those settings thereby working to challenge the construction of certain forms of knowledge as always and only available to the elite. (hooks, 2003, p. 41)

By challenging students to question the construction of knowledge and investigate inequitable social systems, the democratic educator finds ways to learn from and with local communities.

hooks (2003) suggested conversation through "diverse modes of speech" (p. 44) as a method for democratic education. Conversation, sharing knowledge and ideas, and connecting the classroom to the outside world can create a learning community. "Forging a learning community that values wholeness over division, disassociation, splitting, the democratic educator works to create closeness" (hooks, 2003, p. 49). This democratic

idea of conversation and sharing suggests a foundation for service-learning as well as a strong potential connection to cooperative graphic imaging toward the end of construction of community.

A Reciprocal Learning Partnership

To implement a service-learning methodology in the computer graphics class, I utilized an existing partnership between the Florida State University department of Art Education and the Florida Arts and Community Enrichment program (FACE). The FACE program was located in a housing project called Ebony Gardens in the Frenchtown neighborhood adjacent to campus and provided after-school and summer arts classes to youths and young adults. Frenchtown is a low-income community with a low home ownership rate, several housing projects, and small, single-story homes surrounded by large oak trees. The neighborhood has been threatened with an expanding need for student housing and growth of the university. The FACE youths involved with the computer class were African American and ranged in age from 9 to 17 years old, and most lived in the Ebony Gardens housing complex. The FACE program was located in a first-floor apartment in one of the buildings, where participants would attend classes two or more days a week. Several of the FACE youths involved with the computer graphics class also played in the FACE steel drum band, which performed at various events around Tallahassee. FACE participants had also painted more than a dozen murals around Tallahassee, several located in the housing complex on walls surrounding their community garden. During my first visit to Ebony Gardens, I was struck by the sense of community and camaraderie of the children and adults, as the sound of steel drums filled the air. That day of my first visit, the participants, residents of Ebony Gardens and volunteers to FACE, were tending to the garden and picking vegetables to use in a homemade salsa.

While the youths' experiences, opinions, and learning are important to recognize, this article will primarily highlight the ways in which the college students benefited by working with the youths and explore their perceptions of learning in the class. Of the 14 college students enrolled in the class, 3 were graduate students and 11 were undergraduate students. Of the 3 graduate students, 2 were doctoral students in art education and one was a master's student in art education. The under-

By challenging students to question the construction of knowledge and investigate inequitable social systems, the democratic educator finds ways to learn from and with local communities.

graduate students were primarily art education or fine art majors; however, one was an art history major, and one was from a computer-related field. Of the 14 college students, 13 were Caucasian, and the computer student was Korean.

The college students were given two assignments for the class: to create a Photoshop collage with a FACE youth and to develop their own personal website. The first half of the semester, the FACE youths attended the class once a week on the campus of Florida State University. During the first meeting with the youths, the college students were nervous and a little apprehensive; however, the youths seemed to make the college students relax and feel more comfortable around them. Although our class was located in a computer room, to encourage dialogue we held the first meeting with the youths in a regular classroom. The college students also maintained a dialogue about their experiences in Blackboard, our online course management program. This environment of reflection, as an important component of service-learning, provided a place where the college students could turn to each other for advice and reflect on their experiences.

In our first meeting, I asked the college students to partner with a FACE youth, although a few groups had two college students. Each team was charged with the task of learning Adobe® Photoshop and creating a collage of images representing their lives. The college students were not provided training with the Photoshop computer program prior to the arrival of the youths. Instead, the teams were instructed to complete several tutorials and were also provided with short instructional presentations on the software. This approach initially frustrated a couple of the college students who felt they were not fully prepared for their perceived role as teacher.

However, most of the students immediately realized the contributions the youths made to their learning and appreciated the youths' knowledge and fearlessness. Mary¹, an undergraduate art education student, appreciated the early lessons she learned from her youth partner. In her online dialogue, she commented², "His brain was a sponge. He was basically teaching us at 9 years old! ... He is going to be more of a benefit to Naomi and I, than we will be to him, on the computer."

Many of the college students were not very comfortable with the computers, and were even more uncomfortable being responsible for teaching a child computer skills. However, many of the college students began to realize the benefit of their youth partners' experiences on computers. As one college student, Debra, stated, "The younger students aren't as afraid or cautious as we are. You usually can go back and fix something if needed. It is funny that our younger students are comforting us with those words." When following the tutorials, the youths seemed to be leading much of the time, as they remembered the procedures better and were more comfortable making mistakes in the process. In the meantime, the college students had to work harder to keep up with their youth partners on the computer. As their relationships developed through working together on the tutorials, their ideas for the collaborative collages also began to develop.

Beyond Computer Lessons

Through collaboratively learning together, and creatively solving the problem of developing a collage of images, the college students and youth partners had the opportunity to develop meaningful relationships. In developing a theme from which to create a collage of personal images, the youths and college students shared personal pictures with each other and walked around the college campus to take photographs together. The youths were also given disposable cameras to take pictures of their home, community, family and friends. The day the photographs were shared with the youths was one of the most exciting class days, as they showed each other their pictures and talked about the people they had photographed.

I also encouraged the college students to take their youth partners outside to take photographs with the digital cameras. Many of the college students were surprised in realizing that walking around a college campus was a new experience for the youths. During this



Figure 2. An example of a collage utilizing an interest in rap by a FACE youth.

time, the college students talked to the youths about their experiences in college. I overheard Mary, an undergraduate student, for instance, trying to explain the concept of roommates to her 9-year-old partner, LaShawn. Their conversation about roommates carried over into a telephone conversation the next day after Mary had shared her phone number with LaShawn. Mary expressed delight about receiving the phone call and shared the details of their conversation online with her other classmates.

The youths often helped the college students look at the culture of college through a new lens. For instance, Brian, a doctoral student, described his experience walking around campus taking photographs with his teenage partner, Julius. Brian said, "... I often found myself surprised and intrigued with what he found photo worthy. It kind of forced me to look at campus through a fresh pair of eyes." The process of exploring campus together with a digital camera also provided more opportunities for the college students and youths to bond with and learn from each other. While they learned of their differences, they also were able to recognize similarities.

One of the college students described the fun she had with other college students and their youth partners as, "a bunch of silly girls having fun with the digital camera."

For most of the youths, this was their first time experiencing a college setting, a high-quality computer lab, and a program like Photoshop. While they were comfortable working on the computers, their skill levels and experiences had not allowed them the opportunity to refine and expand their abilities. The college students taught the youths how to further their existing knowledge by following the directions of the tutorials and working patiently and consistently. They were also exposed to college life, through the eyes of their college student partners. Although they lived less than 3 miles from campus, for many college probably seemed farther away than the mere 3-mile distance.

While the college students remained consistent throughout the semester, the youths were not. In the end, several college students had worked with as many as three or four youths, and one college student ended her time without having a youth partner. The youths were lost

Computer technology and service-learning are classroom tools that can help students with differing learning styles and should be used to reinforce curricular goals and objectives and not as a goal in and of itself.

to after-school conflicts, family and personal problems, and for one, juvenile detention. While the instability of the situation may suggest problems with such a teaching style, the lessons learned by all of us about the realities of the youths' situations were invaluable and can be compared to some public school experiences. These are valuable lessons to prepare future art teachers for the realities of teaching. Similarly, Taylor (2004) utilized service-learning in university level art education courses in order to create understanding, awareness, and connection in university students and to encourage them to contribute to their college neighborhoods in order to create hope and caring. She proposed integrating service-learning into art education teacher training programs to better prepare future art teachers.

The Collages and Reception

The groups chose themes for their collages based on their experiences learning about each other. After sketches and planning, they selected images for their collages and scanned the photographs or downloaded images from the digital cameras and arranged the images in the Photoshop program. In developing a theme for the collage, some of the students recognized that many of the youths liked to play on a hologram website that pieced together styles of clothes. In recognition of this interest, one college student and her youth partner incorporated fashion as their collage theme (Figure 1, p. 33). Others utilized the youths' interest in music and hip-hop. One college student, for instance, tapped into her partner's recent involvement with a rap band, and portrayed the two of them as deejays to represent an album cover (Figure 2, p. 35).

The collages were printed on poster size photo-quality paper and mounted. We held a reception event in the community room at the youths' housing project, and the poster-sized prints were hung and displayed. The community showed support by attending the event and seemed excited to see the kids' pictures in the posters (Figure 3). A child about 5 years old asked me as she was looking at her older friends in the posters if she could be in one of "those pictures"³ the next time. Several of the FACE youths who had dropped out of the class attended the event and were surprised to see their pictures still in the collages. The college students who had lost their partners still wanted to include them in the final collage. Debra, a college student, described the event as being more about the people and the community than the class assignment or artwork. "This experience was not just about completing an assignment or about having a 'show' as artists often focus on. Yes, the reception was important, but it would have been nothing without the connections and relationships made over the last few months. The artwork was the reason for the show, but it did not take precedence over the people." As a democratic service-learning project, the social lessons were as important to the students' learning as the new skills they developed.

The college students learned more about the FACE youths at the recognition event because they could see them in their own community setting. Laura, a doctoral student and art teacher in the youths' school district, described the reception: "The artwork was a good vehicle for establishing a relationship and a non-threatening way for us to enter their community—sharing our art with them and their friends and family. A celebration." The collage Laura created with her partner, Rob, turned into a kaleidoscope of images, resulting from a "happy accident" (Figure 4), in which she had inadvertently minimized the resolution of the original image (Figure 5).

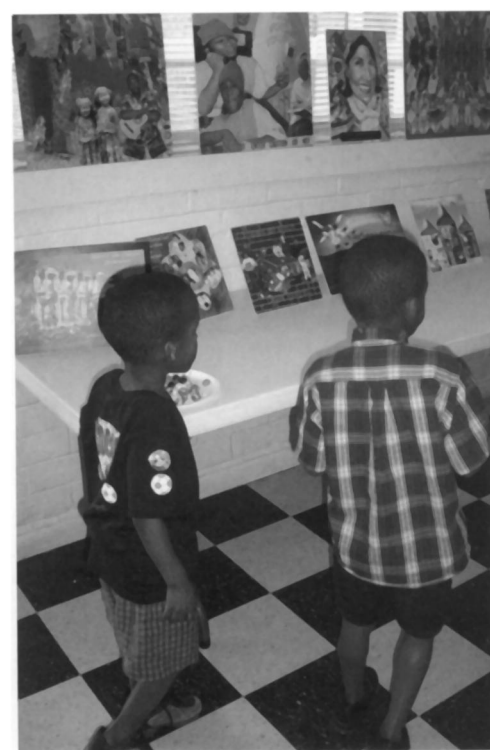


Figure 3. Several younger kids look at the artwork at the reception event.

Several of the relationships between the college students and youths continued outside of class. For instance, Laura made a deal with her partner Rob to take him out for bagels if he brought up one grade on his next report card. A few weeks later, Rob presented Laura with his report card, and she rewarded him with the outing. Ann had faced a semester of frustration in getting her youth partner to actively participate in the project. However, Ann took her youth partner, Demitria, and a friend to the movies, having been asked by Demitria to see the movie *Drumline* together. The experiences outside of the classroom highlighted the relationships that had developed as a result of learning computer graphics together and collaboratively creating a piece of art.

Ann felt that she was able to learn more about the FACE youths, and they were able to learn more about college life through this experience. She said, "I think that what we were able to give the kids was a broadening of experiences. They were able to see what the college atmosphere and average college kid is like. And us college kids got the same thing from the FACE youth and Ebony Gardens [their community]." The depth of learning was revealed in comments, like Ann's, that alluded to the college students' awareness of the reciprocal learning experience. In recognizing the youths as contributors to the class, the college students realized the contributions the youths made to the class and their learning.



Left, Figure 4. An example of a collage that resulted from an "accident" with resolution.

Above, Figure 5. Laura and Rob show their collage at the reception event.

Collaborative Imaging through Service-Learning

This example suggests that service-learning and collaborative computer imaging can be mutually reinforcing through the collaborative learning of computer graphics and production of art. Simultaneously, as the students participating in this computer graphics class were exposed to various ways of knowing and learning through the service-learning curriculum, their learning of computer graphics was enhanced. In the meantime, and as importantly, this service-learning methodology could empower the students to critically and actively examine their place in the local community. The collaborative process of learning Photoshop and producing an art piece revealed lessons to the college students beyond computer skills while reinforcing their learning of the computer software. The community construction achieved in this example through the application of cooperative imaging in a democratic fashion adhered to the principles of service-learning. As such, this example

could be a model for further exploration in that it may have potential for community art education practice in the digital age.

Technology has been shown to both enhance and hinder community connections, depending upon the use and circumstances. For instance, the use of Internet chat rooms has spurred a debate about the role of the Internet in creating communities (Driskell & Lyon, 2002). While the Internet can connect people from across the world, it often isolates those same people from their neighbors (Driskell & Lyon, 2002). However, Freedman (1991) discovered in a study of interactive computer graphics instruction that students are more inclined to collaborate while making art on computers than with more traditional media. She discovered that students tend to consult other students with more computer experience and also feel more comfortable making suggested changes to their artwork with the assurance that they can convert back to their original image easily on the computer (Freedman, 1991).

The benefits and limitations between service-learning and computer technology in education are similar in several ways. Similar to service-learning, computer technology promotes a student-centered, global classroom with active student inquiry (Wang, 2002). Also similar to service-learning, limitations in funding, support, and guidance have hindered the growth of computer technology in the classroom (Wang, 2002). Computer technology and service-learning are classroom tools that can help students with differing learning styles and should be used to reinforce curricular goals and objectives and not as a goal in and of itself. As was demonstrated in this example, service-learning methodologies have the potential to enhance skills-building classes such as computer graphics as the skills are applied to real situations, students are encouraged to learn from each other, and activities can spur meaningful dialogue among students and community participants.

"I learned that I was indeed learning with our youth, and working with them actually helped. I felt that I learned Photoshop much better because I felt like LaShawn was in some way depending on me to know my stuff."

While a couple of the college students initially struggled with the service-learning approach, most of the students recognized the value the youths brought to their learning experience. One college student reflected on the experience, saying, "Initially I thought that working with the FACE youth would be a different experience, and then I got partnered with John and saw how interesting it was to learn about someone so totally different from myself, with different interests and a different background." The exchange of ideas, values, interests, and knowledge of computers created a learning environment in which we all learned from each other and did not necessarily rely only upon the instructor's assistance. It was a computer classroom in which students interacted with one another face-to-face as well as through online dialogue.

Conclusion

This experience for the college students was varied. They were exposed to real life situations in challenging the construction of knowledge (hooks, 2003) while sharing their own knowledge and experiences with those who have had fewer opportunities. The college student from Korea commented on her experience after seeing her youth partner playing the drums at the reception event. "My partner, Danshaye, looked excited about the outcome of our collage and our showing up in the area. He played live music to us with his friends. While he was playing the drum, he looked really engrossed (even sweating) and I enjoyed their music a lot. The room was small and dark a little bit, but I felt a passion for music." At the reception event, the college students were impressed when seeing the youths display their strengths and talents in their own environment.

At the same time, by considering the computer graphics class as a lesson about social responsibility and artistic values, the college students could make connections between learning the Photoshop program and application in their own teaching and artmaking. Beth, a graduate student, reflected on her perceptions of the reception event: "The experience on Tuesday [the reception], in relation to the entire semester, confirmed that art is about people. It was sort of crazy for me (not the best technologically adept individual) not only to learn the basics of Photoshop, but to be responsible for teaching a 6th grader, and hoping to make sure she enjoyed the experience." As the class was a part of the art educa-

tion teacher-training program at Florida State University, it was important that the college students be able to apply their learning to future teaching strategies. The students' experiences working with and teaching the youths required them to consider various approaches to engaging them in class activities, a skill they will undoubtedly use as art teachers.

The college students also learned the Photoshop program, as evidenced by their final art pieces, displayed the depth of their understanding of the program. Several of the students felt they learned the program better through the service-learning approach, as the involvement of the youths required them to work hard to learn the program and the youths helped them relax and feel more comfortable on the computer. Mary commented, "I learned that I was indeed learning with our youth[s], and working with them actually helped. I felt that I learned Photoshop much better because I felt like LaShawn was in some way depending on me to know my stuff." These lessons went beyond knowledge of computer graphics and reinforced their understanding of the Photoshop program for future applications as artists and art teachers.

Karen Hutzel is an assistant professor at The Ohio State University, Columbus.
E-mail: hutzel.4@osu.edu

REFERENCES

- Adejumo, C. O. (2000). Community-based art. *School Arts*, 99(6), 12-13.
- Anderson, T., & Milbrandt, M. (2005). *Art for life: Authentic instruction in art*. New York: McGraw-Hill.
- Bastos, F. M. C. (2002). Making the familiar strange: A community-based art education framework. In Y. Gaudelius & P. Speirs (Eds.), *Contemporary issues in art education* (pp.70-83). Upper Saddle River, NJ: Prentice Hall.
- Bastos, F. M. C., & Hutzel, K. (2004). "Art in the Market" project: Addressing racial issues through community art. *Journal of Cultural Research in Art Education*, 22, 86-98.
- Community Works Press. (2001). *Vital results through service-learning: Linking students and community in Vermont schools*. Battleboro, VT: Community Works Press.
- Congdon, K. (2004). *Community art in action*. Worcester, MA: Davis Publications, Inc.
- Deans, T. (1999). Service-learning in two keys: Paulo Freire's critical pedagogy in relation to John Dewey's pragmatism. *Michigan Journal of Community Service Learning*, 6, 15-29.
- Dewey, J. (1938). *Experience and education*. New York: Kappa Delta Pi.
- Driskell, R. B., & Lyon, L. (2002). Are virtual communities true communities? Examining the environments and elements of community. *City & Community*, 1(4), 373-390.
- Freedman, K. (1991). Possibilities of interactive computer graphics for art instruction: A summary of research. *Art Education*, 44(3), 41-47.
- Freire, P. (1993). *Pedagogy of the oppressed*. New York: Continuum International Publishing Group, Inc.
- hooks, b. (2003). *Teaching community: A pedagogy of hope*. New York: Routledge.
- Hutzel, K., & Cerulean, S. (2003). Taking art education to the streets: "The Procession of the Species" as community arts. *Journal of Cultural Research in Art Education*, 21, 36-43.
- Sigmon, R. L. (1979). Service-learning: Three principles. *Synergist*. National Center for Service-Learning, ACTION, 8(1), 9-11.
- Taylor, P. G. (2002). Service-learning as post-modern art and pedagogy. *Studies in Art Education*, 43(2), 124-140.
- Taylor, P. G. (2004). Service-learning and a sense of place. *Journal of Cultural Research in Art Education*, 22(1), 33-44.
- Ulbricht, J. (2005). What is community-based art education? *Art Education*, 58(2), 6-12.
- Wang, L. Y. (2002). How teachers use computers in instructional practice—Four examples in American schools. *Journal of Art and Design Education*, 21(2), 154-163.

ENDNOTES

- ¹Names of college students and FACE youths have been changed both in text and quotes.
- ²Quotes from college students were taken from online dialogue on the Blackboard course site.
- ³The quote from the FACE youth was taken from observations of the reception event.