

WHAT IS NETPAINTING?

NetPainting describes the use of a feature, NetPainter, in the paint software Painter that supports real-time (synchronous) collaboration between Painter users across a local area network or via the Internet. During a NetPainting session, as one user paints or makes changes to an image the other users see the brush strokes and effects appearing in the canvas window on their own computer screens. Only one user can paint at one time. When users finish painting, they turn the controls over to another user by means of a “traffic light” system. Another user can then carry on where the previous user left off. Users take turns working until the project is finished and/or the session is over.

A neat feature of NetPainter is the Chat Window. All users, at any time in a NetPainting session, can write short notes that appear in every user’s Chat Window. In this way, interactions can be written as well as visual.

HOW THIS COLLABORATION CAME ABOUT

This collaboration was prompted by Jeffrey Kraus, an art teacher at Anderson High School in Cincinnati, Ohio. He came across my Web site (www.jeremysutton.com) and sent me a note asking about my interest in joining a NetPainting session with some of his students. I was enthusiastic about the idea. I was keen to explore the artistic interaction between myself and the students in a way that would be educational as well as fun. The students were also very excited.

Jeff’s objectives were to grow his students’ creativity, enrich their visual awareness, and expand their horizons by exposing them to outside professional artists in the working world.

THE EQUIPMENT

I used a Macintosh 9500/132 (228 MB RAM, 2 GB drive) with 20-inch color monitor, 28 baud Supra modem, and regular phone line. The school used Pentium PCs (64 MB RAM, 2 GB drives) with 15-inch color monitors and T1 lines. All computers had Painter 5.03 and Wacom tablets installed. We worked on canvases that were 8 inches x 10 inches at 72 DPI.



From Session 1 (self portraits)

SESSION FORMAT

Jeff and I agreed on a tentative format for the sessions. The initial format was three 30-minute sessions, each with three students and myself.

Session 1 would be loosely based on self-portraits. Each artist would establish an overlapping rectangular area within the compositional area (each rectangle should overlap the others about a third). Each in turn would develop a self-portrait (using a mirror placed next to the computer), making sure to address the composite areas.

The second session would be a single portrait that all artists would work on, using the following suggested steps.

1. Establish a textured or patterned background.
2. Use distort or similar brush to lay out image.
3. Establish value pattern.
4. Begin building details.
5. Develop a decorative border.

The third session would be freeform, beginning with expressive brush strokes and adding on to the composition either by moving towards imagery or maintaining a non-objective abstract composition.

These general guidelines were given to the students:

- Work for about three-four minutes at a time.
- Use the brushes. Stay away from special-effects filters.
- Add on to or modify an image but don’t clear the canvas and eliminate all previous work.

THE EXPERIENCE

We set up a technical rehearsal session followed a day later by the “real” thing. After a few initial tries, we succeeded in establishing an Internet connection between my computer and three computers at the school.



From Session 2 (single portrait)

Painting Together Across the World: Collaborative NetPainting Between High School Students & Professional Artist

I initiated the painting in most sessions and then passed the control on after a few minutes. It was interesting to communicate with the students through the Chat Window. We encouraged each other, commented on the brush strokes and tools and effects we saw being applied, discussed the experience, and talked about creating art in general.

Jeff describes the experience at the high school:

“This experience went far beyond my expectations. I felt that the process was artistically stimulating, and the results were outstanding. I wish you could have been here to have seen my students as they worked. They were engrossed in the process, and each and every one of them were trying hard to watch what you were doing and how you were doing it. The only major problem that I had was too many students wanted to work with you (Jeremy there obviously is not enough of you to go around).”

THE RESULTS

You can see here results from the three sessions. I encouraged the students to save versions regularly and thus build up a documentation of the process.

THE BENEFITS

There were clear artistic, technical, and social benefits for both myself and all the students involved. In this section, I let Jeff and his students speak for themselves.

ARTISTIC BENEFITS

Jeff

“Creatively the students were forced to become more flexible because they had to respond to changes to their work that was beyond their control. The quick pace of the process forced them to become more direct and react more intuitively.”

Christy

“I generally work tight, and I learned to be more free when painting. It has also helped me to be less conscious when people are watching me work.”

Eamon

“I learned that as an individual my ideas became narrow, but when I was working collaboratively my creative thinking was greatly enhanced.”

Sarah

“I liked how the style and techniques of four people all came into one picture.”

TECHNICAL BENEFITS

Jeff

“Technically, the students learned practical techniques: how to use specific brushes, how to construct an image from the very general to the specific, how to employ subjective color and still maintain a sense of reality.”

Sarah

“I enjoyed watching how other people use the tools provided, and I believe I understand the use of creation tools better.”

Whitney

“Some techniques and skills I acquired were shading for facial features.”

Eva

“I learned how to use some new brushes, how to build up a face using different media.”

SOCIAL BENEFITS

Eva

“I learned how to work with others.”

Whitney

“I learned that working with others is fun, but not as easy as thought to be. A lot of cooperation and patience is needed.”

Rory

“I learned the importance of collaboration in artwork. Waiting to take a turn makes one realize the importance of everything contributing to one whole. It was great seeing how the work evolved as a whole.”

Whitney

“I think the fact of more than one person owning the painting and many people contributing to one piece of artwork is astounding. This way, no one person can be judged for what they did or didn't do.”

Eamon

“I love the idea of working with someone from across the country. Hopefully someday I will be able to work across the globe.”

Lindsey

“I liked putting a piece together with someone that could be anywhere in the world. This enables people from anywhere to present new ideas and styles to you.”

Rory

“I liked working with someone other than my peers and someone who had artistic experience. It was a great learning experience.”

Christy

“It was really neat to work with a professional and get feedback.”

Whitney

“Working with Jeremy Sutton on Painter was so wonderful. I considered it an honor to work with Jeremy Sutton because creating a piece of artwork with an artist as admirable as him was a phenomenal experience.”

THE CHALLENGES

Logistical

We were three time zones apart and thus had to carefully coordinate our session schedules so we were ready at our computers at the same time. On the student end, this was an extracurricular art department activity. Students gave up personal time to participate.

Technical

Initially, there was a fire wall problem at the high school that had to be solved. We then had to carefully follow the set up procedures for connecting through Painter. We also had to master the controls and techniques associated with using the NetPainter feature, such as the traffic-light buttons. Sometimes the connection was lost inexplicably and the session abruptly ended! In those cases we reconnected and started again. I found it useful when students customized the User Name and Chat ID in the Set Up dialog box. This allowed me to easily see which student was painting and who was sending chat messages.

We were careful to ensure that all the Brushes and Art Materials in Painter on all the collaborating computers were the same. Even so, there were still some problems:

Whitney

"It got confusing with certain brushes and brush strokes that didn't show up on certain computers."

Structural and Temporal

How to structure the sessions? How many students to work with in a session? How long should a session be? How long to allow each user to work before passing on control? How to ensure that everyone took their turn in the right order? All the students wished there were fewer people and more time per session. Several students said they would have preferred to work one on one:

Eva

"I only got about three minutes to work, and I was a little confused about how long I was supposed to take and whose turn it was. I think it would be more efficient to work on a one-to-one basis, so that we could get more done, and it would be less confusing."

In subsequent sessions we listened to the students' feedback, reduced the number of users in a session and increased the duration of each session.

What constraints, rules and boundary conditions to impose on the process and content? The constraints we adopted were designed to challenge the students and exercise their artistic skills.

THE FUTURE

We are looking forward to continuing the NetPainting collaborations, and Jeff and his students are hoping to link up with other schools and artists around the world (e-mail Jeff at jkraus@foresthills.edu if you are interested).

I hope the success of my NetPainting collaboration with the Cincinnati students serves to encourage schools and artists to form their own NetPainting partnerships and thus help develop student's artistic, technical, and social skills.

Jeff says it best:

"I wanted to express to you what an impact you had on my students. Each and every one of them felt they had grown as a result of their contact with you. Professionals do not realize what impact they have on students. It is professionals like yourself taking the time out for today's youth that makes what we teach in the classroom concrete."

Besides expanding and stimulating them creatively, the NetPainting experience also leads the way naturally into the reality of 21st-century telecommuting. Many of these students will work on computers at locations separate from their employers.

Here is a real-life opportunity for students to interact with, and learn from, someone they may otherwise never meet. They will take that example as a model for the way creative collaboration can be achieved via the Internet between artists anywhere in the world. NetPainting is clearly a bridge to future realities.



From Session 3 (freeform)