Gallery to Classroom (G2C): Bringing the MIA to schools using web-based distance technologies. White paper by Sheila McGuire , Head of School and Teacher Programs, Minneapolis Institute of Arts

Overview of the Project

Through a Digital Humanities Start-Up grant from the National Endowment of the Humanities, the Minneapolis Institute of Arts (MIA) brought art from the museum galleries to nearly 800 students in their classrooms using an iPhone, earpiece, and webinar software. Museum educators (staff and volunteers) facilitated classroom lessons ranging from 20 to 45 minutes from the museum galleries, eliminating the usual geographic and financial constraints that prevent students from visiting the museum in person. The Gallery to Classroom (G2C) program may well be the perfect solution for teachers unable to physically bring their students to the museum to receive a short, customized lesson, and for MIA educators to help fulfill the museum's mission to enrich the community "by collecting, preserving, and making accessible outstanding works of art from the world's diverse cultures."

Museums face greater challenges daily to connect their collections with students in schools. As teachers experience more pressure than ever to prepare students to succeed on tests, justify field trips by relating them to state standards and district scope-and-sequence directives, and acquire funds for increasing costs of bus transportation, distance learning is a valuable way to provide access to high quality experiences with art in museums.

A recent report published by the Crystal Bridges Museum of American Art in Bentonville, Arkansas, "Bridging the Gap: Expanding Access to the Visual Arts through Distance Technology" (2013), delves deeply into distance learning in museums by exploring its history, current trends, and considerations for the future. The report's introduction acknowledges that art museums have effectively developed and implemented programs to engage and educate youth and adults while in the physical museum space. It also states that, "Museums have also increased their offerings of distance education opportunities, but many questions remain regarding how to best transmit informative and transformative visual arts experiences when the learners are not in the museum" (Crystal Bridges Museum of American Art, "Bridging the Gap: Expanding Access to the Visual Arts through Distance Technology," 2013, p.4).

Though the main goal of the report is to help inform Crystal Bridges as they tackle their own initiatives to expand their reach through distance learning, particularly into rural areas, it is also intended to promote quality distance-education programming throughout the field. The report acknowledges just how rapidly nascent technologies are being explored and how challenging it is to predict future developments in distance learning delivery platforms. Insights gathered from interviews conducted with museum educators, technologists and others, working in the field of distance learning, enhance readers' understanding of the visions, considerations and hopes of those involved in this exciting field. The MIA was interviewed for this report and invited to participate in the Crystal Bridges Distance Learning Summit because of its experimental work on the Gallery to Classroom project.

Gallery to Classroom (G2C) is an innovative and cost-effective way to bring the museum's collection to students in their classrooms. G2C will enable the MIA to extend its already significant role in the education of school students and others in the state of Minnesota and beyond through guided tours and studio classes, in-school programs, and online resources for teachers and students.

It has great promise as a tool to help us provide more students locally and globally with learning opportunities that expand their view of the world, and inspire them to ask questions, think critically, and be creative.

In fact, the relative ease of delivery and ability to utilize inquiry and other facilitation skills already used on gallery tours made the decision to focus on the web-based gallery to classroom lessons simple. As part of the training program to become facilitators of online learning, eight museum guides practiced the basics of delivering lessons with the iPhone, including fundamental skills such as framing images with the iPhone's camera. By mid-July 2013, four of the guides participated in actual lessons, three as facilitators, and one, as an assistant.

Throughout August and September, Head of School and Teacher Programs and project leader Sheila McGuire and Senior Educator Ann Isaacson facilitated intensive, in-gallery, hands-on sessions with the guides using an iPod Touch. Ultimately, it proved less reliable, and the image quality was inferior to the iPhone, so we traded it in for an iPhone 5C. The iPhone 5C has been the perfect companion. Through these sessions it became clear that while some participants prefer working as pairs with the camera person wearing the iPad on her chest, others prefer to lead their lessons on their own, using just the iPhone. We drafted written instructions for both the one-person and two-person systems.

In late September, when we had a core group of volunteers ready to deliver lessons, we contracted with three teachers and an arts coordinator to help us implement the program in their classrooms and provide valuable feedback to enrich our understanding of the potential strengths and weaknesses of the G2C lessons. Our teacher consultants were Susan Tuck, Pillsbury Elementary, Minneapolis; Marni Oberpriller, Johnson High School, St. Paul; Rachel Koniar, School of Engineering and the Arts at Olsen Elementary and Neill Elementary, Robbinsdale District; and Jolanda Dranchak, Anoka Middle School, Anoka. Marni Oberpriller and Jolanda Dranchak were instrumental to making our earliest G2C lessons possible during spring and summer 2013.

Early on we all discussed what it would look like for the tour guides to train other guides. A persistent discomfort with some of the technical components of connecting the devices and with schools prevented guides from feeling ready to do this on their own. Following a session during which Sheila McGuire and Ann Isaacson presented rough-cut videos they made to demo the two types of systems, guides and staff concluded that both the existing group and future guides would benefit from a training video that they could watch as often as needed to gain comfort with the process. So, staff contracted with an experienced videographer to create two videos, which are now available on the guides' own website and the museum's YouTube channel (http://youtu.be/OAMfQYZEE2k and http://youtu.be/uJvSwrVJeL0). Written scripts were also made available to all of the guides.

While the videos were being produced staff and guides trained a new group of ten guides on both methods. Experienced guides turned out in force to collaborate with staff on this training, a wonderful model for the future. Guides, including two of the new trainees who had already been called upon to deliver lessons in the galleries, shared their experiences (including a few good war stories!) and everyone gained firsthand experience setting up the equipment and witnessing what it looked like on the receiving end of a gallery to classroom webinar. Two follow-up practice sessions gave guides additional opportunities to experiment.

In one month the full team delivered 23 lessons (including a record five lessons in one day!) that reached nearly 600 students. Lessons included animals in Chinese ceramics for 6th graders, bird adaptations as represented in art for 3rd graders, Chinese brush painting for 5th graders, visual elements for 2nd-graders, and Native American ceramic decoration for high school students in an advanced ceramics class. For the most part the lessons went smoothly because we conducted tech checks prior to working with each new school or classroom. We learned a lot from each other. Once one person figured out how to reconnect to the Wi-Fi mid-lesson, she could share that with the group. One guide and teacher relied on the chat function of WebEx to pose student questions when the audio from the classroom to the guide failed.

The beauty of G2C in part lies in how well it supports the type of question-based gallery teaching at which MIA staff and guides excel. The MIA places great emphasis on student-centered, object-based learning. Learning and Innovation staff train tour guides in the art of facilitating conversations with learners. We value open-ended questions, active listening, and learner participation in our programs. G2C allows us the same, or at least nearly the same, ability to engage students in conversations about artworks as a tour in the museum does. Students loved being able to ask the guides questions. They enjoyed the surprise directions in which some of their questions could take the tour. Because the guides did not have groups to manage in the galleries, they had great freedom to move with the iPhone to galleries or artworks they might not have planned to use.

Evaluation

The level of student participation during the webinars is a clear indicator that the G2C model is an effective way to engage with a wide range of learners in diverse classrooms. Frequent conversations with our core group of teachers helped us hone our conversations and technology as we went. To evaluate the program from the teacher's perspective, we sent a list of questions to them in November. The responses immediately helped us to effectively communicate the technology requirements on the school end and the benefits of the lessons.

A sample of responses to each question illustrates the ease and impact of G2C on teachers and students.

What setup (equipment, technology, smart board, whatever) did you use for your gallery to classroom lessons?
- "Smart board, Logitech camera, and classroom speakers and mic."
- "LCD projector, Ken-a-vision document camera, external microphone, Dell computer, my personal iPad, Webex internet software, Explorer 8, Matt Smith our building tech, and a dongle."
- "I used the technology already available in my classroom: desktop computer with monitor facing the class, data projector, screen/smartboard and the existing audio system for sound from the computer."

How easy or difficult was it to get the technology you needed in place on time for the lessons?
- "Nothing needed to be changed or added, other than turning the monitor toward the students."
- "It was a little difficult since I haven't used all these technologies together. Also teaching art on a cart made it more difficult since each room setup was different."

Did you have any challenges setting up WebEx on your system at school? If yes, please explain.
- □ "Worked well. Only problem was knowing which speaker for WebEx to use. Once that was figured out, no problem."

- □ "I had to figure out what plug-ins were needed. I had to add JAVA and Explorer 8 to my Dell. I needed the building tech to figure this out for me."

What else do we need to know about the technology you used?
- □ **"**I loved the ease and simplicity of the exchange."

From your perspective, what were the highlights of having museum educators (staff and volunteers) facilitate conversations with your students over the Web?
- □ "It eliminates the time, travel, expense of frequent site visits. (And the art teacher never gets to go anyway!)"

- □ "The students develop a deeper ownership of the museum—an amazing resource in our community—the more they are able to interact with the art."

- □ "They felt empowered and important because of the personal responses from the docents to their observations. What a great way to connect classroom based arts learning with real museum art and artifacts."

- □ "Having expert staff on hand who could answer in-depth questions. My favorit was when the kids asked about the Chinese having cricket pets, and we got to see cricket houses, water bowls, and traps."

- □ "1. Fit beautifully into curricular area we were studying China: pottery, mold making and ceramics. 2. Opportunity to interact with expert and knowledgeable personnel on specific artwork at MIA. 3. An opportunity [to] expand artistic vision for students outside of classroom and reminding or introducing them to fantastic resources in our own backyard. One student came up to me the following Monday after our webinar and told me that she convinced her family that she needed to go to the MIA. She said the pieces were 'cool' in the webinar, but even better in person! 4. All students could attend event without the financial commitment and scheduling nightmares!"

What were the greatest challenges you faced? Please address anything--technology, scheduling, content development, etc.
- □ "The clarity of the audio went in and out throughout the session. At times it was difficult to hear."

- □ "Audio was difficult to work on both ends."

- □ "None. We have equipment and webinar within our district allowing us to do more of these events."

- □ "It would be helpful to have one image from the gallery to classroom lesson in advance. Kind of a teaser for the kids as well as a planning resource for the teacher. "

Describe your students' responses to these new kind of lessons.
- □ "Students loved being able to ask questions. It fueled their curiosity in a way that just looking at an artwork would not have done."

- ▫ "As indicated in thank you notes (that I read before I sent), students really enjoyed this opportunity and learned quite a bit about Chinese culture and its artwork."

- ▫ "They were excited to try it and pretty attentive during our session. I usually heard from most students, even those who are usually shy during class. They keep asking me, "When are we going to do the thing with our museum friends again?""

How did you prep your students?
- ▫ "We talked about being polite, and how the same rules apply to a digital visit, as if the person were in the room. We also prepped for tech problems and what patience would like, sounded like and felt like."

- ▫ "I introduced the lesson and new vocabulary such as docents. I compared it to Skype and Facetime so they had a general idea about what would happen."

- ▫ "We had looked in books and watched a video. However, the session with the museum was the highlight of the Southwest Pottery unit for my advanced students. This was something new they'd [not] participated in before."

What else would you want to make sure we include in our report to NEH?
- ▫ "My principal stopped in for one of our sessions, and thought it was an innovative merger of learning, technology and local resources. For me, it was easy to give the students an experience of being transported to another place, with the added bonus of conversations with the docents. In my high poverty school, anything I can do to expose my students to a diverse array of cultural resources is worth the effort. Thanks for making it simple and accessible."

- ▫ "It was a great experience for the students who haven't had the museum experience. Many of the students said they wanted to visit the museum and see more."

- ▫ "How invaluable this program is for my students! There were some issues with preparing the technology, but that was insignificant compared to the positive impact the sessions had on my students."

- ▫ "This is a truly wonderful way to introduce primary resources into our classrooms!"

- ▫ "Thanks for including me in this experiment. It's been a great opportunity to bring a deeper understanding of the methods, tools, and cultures of the art we've been studying. Not to mention I think it has sparked more interest in visiting museums."

In preparation for a presentation by Sheila McGuire and Jolanda Dranchak about G2C at the TIES technology in education conference in December, we also asked: "If you had to put together a list of 10 tips for practical videoconferencing related to the work we have been doing, what would your ten tips be? Feel free to include anything from content development, technology issues, communication with the museum, prepping students, etc." Teacher responses were incorporated into the presentation.

Promotion
Sheila McGuire and Jolanda Dranchak presented "Practical Video Conferencing: 12 Tips," to teachers and school administrators and technologists at the TIES conference on December 16, 2013. They opened the presentation with a live feed greeting from Ann Isaacson from the museum

galleries utilizing the G2C technology. The presentation emphasized the collaborative nature of G2C lessons and prompted potential partners to think about key questions. We showed a video made in an Anoka Middle School classroom that demonstrates how engaged students are in the virtual gallery tour experience.

What's Next?
We are currently considering ways to streamline the scheduling of G2C experiences to align this process more closely with our current system for scheduling tours at the museum and reduce the amount of staff time it takes at present. To do this, we will experiment with an electronic form that requires teachers to complete a checklist of the tools they will need to have in the classroom, consider scheduling at optimum times before and after school tours, and articulate the goals of the lessons they would like MIA to support.

Critical to the success and sustainability of G2C will be the availability of a significant corps of guides who are trained and comfortable with the technology. As we learned throughout the fall, the actual act of teaching in front of the iPhone camera is not the challenge. Our guides are naturals. The technology can be intimidating, but that obstacle can be overcome with ample opportunity to learn, observe, and practice. Just this week a guide delivered a lesson to her daughter's class of second-graders in Tacoma, Washington. She invited two of her docent colleagues along to observe because they have already identified classes they work with that would benefit from G2C lessons! This docent plans to meet with her daughter's students every other week!

A couple of other areas we have yet to explore with G2C are its effectiveness as a tool for delivering simple art-making lessons in classrooms, and its use as a tool to enhance tour guide training. Perhaps most significant is the potential to extend the reach of the museum's training for Picture People, parent volunteers who facilitate in-school Art Adventure sessions using themed sets of poster-sized images of works in the MIA's collection. Although a scheduled G2C training session for Picture People in Duluth, Minnesota, was canceled this December due to bad weather, we have every intention of experimenting with our Duluth partners and others in the year ahead to see how G2C technology can help volunteers who find it challenging to travel to Minneapolis for training sessions.

We are also excited to explore ways to use G2C to connect students in different classrooms (within Minnesota, and across the United States, and even the world) with one another. The web-based technology and the possibility of using even the most basic of tools on the school's end (we have had lessons delivered to students watching on an iPad!) convinces us that we have only begun to explore just how far we can extend the great artworks and stories of the MIA into our global community.