Grantee Name:
Tabi Eberhardt

Title of Project:
STEAM Art Project: Using Digital Interactive Design Tools in a Project-Based Learning Environment
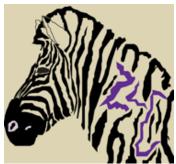
City, State:
Seattle, WA

Grant Period:
July 2011- June 2012

NAEF Grant Amount:
$1980.00 (McMullan)

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Zebra Logo by Zoe. This logo was created for a project where students created their own logos to be used to represent themselves throughout the course. The logo was created in Adobe Illustrator provided by the NAEF grant.

Project Description:
The purpose of the STEM/Art project is to develop and deliver an art-based curriculum where students use digital interactive design tools to enhance their understanding of STEM problems and concepts through a project-based learning approach.

Project Goals and Objectives:
The STEM/Art project is designed to teach TAFA students the creative process, art history and cultural context, art criticism, and introduce students to the technical aspects of professional design software (Adobe Creative Suite 5, or CS5), and apply those understandings to explore and solve STEM problems and concepts through a project-based learning approach. The STEM/Art project will use National arts Standards along with Washington state Art Essential Academic Learning Requirements (EALRs) as a guide for curriculum design. It will also use the adopted TAF Academy educational philosophies of PBL and AIW to implement the standards and create artwork. Through these perspectives, students will develop projects through an extended process of inquiry in response to a complex question, problem or challenge. While allowing for student voice and choice, projects will be planned, managed, and assessed to help students learn key academic content, practice 21st Century Skills (such as collaboration, communication, and critical thinking), and create high-quality, authentic products and presentations.

Description of Activities Supported by this Grant.
Examples of possible project products will include graphic design, traditional fine art, web design, book design, photo-editing, magazine design, optical art, still life drawings, and CD cover design. To expose students to more authentic intellectual work, students will practice critiquing the work of their peers as well as professional artworks. Students will also be required to find and fill digital artwork needs within the school and surrounding community and organize opportunities for their work to be made public.

The course will provide students with ample opportunities to become published artists before graduating high school.
Listed below are the four primary objectives of the STEM/Art project:
1. Develop a year-long CS5 curriculum aligned with National Art Standards and Washington state Art EALRs
2. Implement CS5 curriculum grades 7-12 to reach a maximum of 200 students
3. Plan and facilitate the completion of 2 interdisciplinary student-led projects utilizing CS5 skills
4. Complete STEM/Art project grant report

Results: Lessons Learned: One of the lessons learned is that it was over-ambitious to expect complete integration for all students; however, my hope is to use this experience as a jumping off point for more industry standard technology use in the visual art classroom. Classroom management is a challenge when teaching multiple media at one time in the classroom. For example, I was teaching a lesson on shading to a group of 23 students. Five of them were learning via Adobe Illustrator and the rest of the students were working with charcoal. I demonstrated using both forms of media for the benefit of both groups. Moving from charcoal to computers had logistical problems including avoiding charcoal getting inside of the computers. While the students were not moving from one media to the other, I was. A third lesson learned is that students are capable of teaching each other & preparing tutorials for each other. A fourth lesson learned was regarding pacing for student learning of CS5.5 programs. In the beginning of the course for high school computer art, I moved too quickly through the information, and often had to go back & re-teach or provide extra practice. Towards the end of the course, I should have sped up the pace of instruction more. Once students had a strong understanding of basic functions, I was able to include more complex content in projects. Finally, several lessons were learned in regards to exhibiting final artwork. When planning exhibitions with outside groups, it is important to allow more time for planning; however I learned how community organizations and schools can work together to create a professional & exciting exhibition

Impact of Receiving this Grant: The impact of the grant includes access to industry-standard software for public school students in grades 6-12 at TAF Academy. By allowing students to work with this software at an early age, it gives these students an advantage they would not otherwise have. Students also have the opportunity to learn traditional visual art concepts while learning to use CS5.5 software. Complete integration of technology was possible for a small group of students, while the rest of the school had increased access to and smaller amounts of technology integration. Within the first school year, the art classroom already acquired a large format color printer so that the artworks created may be printed in-house instead of having to go elsewhere for printing. Another result of this grant is the creation of a Computer Art course at TAF Academy. This is a dedicated course where students learn visual art concepts through using CS5.5 to make artworks. As a culminating project for this course, students exhibited artworks for over one month in a professional gallery space off campus.

Grantee Biography: Tabi Eberhardt is the visual art teacher at Technology Access Foundation Academy, a public school in Federal Way Public Schools. Tabi has taught at TAFA since the first year it was open in 2008. Prior to teaching at TAFA, Tabi helped re-open the New Orleans public schools after hurricanes Katrina & Rita. In New Orleans, Tabi worked at John Dibert School and Clark High School where she established art departments in both schools. Tabi also taught at North Gwinnett High School in Suwanee, GA from 2003-2006. At NGHS Tabi began an AP Art History course, taught Computer Art, and 2d/3d design, and established the Visual Art Booster Club. Tabi earned her Bachelor of Fine Arts degree in Art Education from Georgia State University in 2003. Tabi is a working artist creating & performing in multi-media presentations throughout the Pacific Northwest.

About the National Art Education Foundation
NAEF supports visual art educators and promotes the teaching of art through professional development, research, and program sponsorship. As an independent, philanthropic organization, NAEF assists with efforts to represent the teachers of art in America, improve the conditions of teaching art; promote the teaching of art; encourage research and experimentation in art education; sponsor institutes, conferences, and programs on art education; and to publish articles, reports, and surveys about art. The Foundation has supported 266 projects since its inception in 1985. NAEF funding supports a wide variety of professional activities, including research in art education, scholarships for professional development, promotion of art education as an integral part of the curriculum; establishment and/or improvement of art instruction in public and private K-16 schools; promotion of the teaching of art through activities related to the instructional process, curriculum, student learning, student assessment, classroom behavior, management, or discipline; purchase of art equipment and/or instructional resources. Donations in support of NAEF, a 501(c)3 tax exempt organization, are tax deductible and greatly appreciated.