Appendix

Learning Objectives:

Students will use technology to generate ways of displaying their artwork through virtual reality via photographing, uploading.

Students will explore a cyber reality and decide where to position their personal works for display and in what style.

Students will communicate the exhibition of their portfolio works in a spatially pleasing way in their virtual world the will design a space to display and view other's works that have been exhibited

Students will create and alter their own avatar to suit their own design. They will interact with other people in this cyber world in the form of avatars. Student will communicate with other avatars through this world. They will walk, run and fly while discovering where they want to create their graphic display exhibition.

Students will tour the architecture of Frank Lloyd Wright's Darwin Martin House and Tiffany glass in The Church of the Good Shepherd to see the differing glass window styles of the light screens of Frank Lloyd Wright and the stained glass window of Louis Comfort Tiffany.

Students will create their own glass fusing in response to our field trip of viewing Frank Lloyd Wright's light screens and Louis Comfort Tiffany's stained glass.

Students will work with and under a Technology Coordinator to enhance their ability to present and arrange their art works which can be seen via cyber space across the world.

National Core Visual Art Standards:1

#1: Creating#2: Presenting#3: Responding#4: Connecting

¹ "Conceptual Framework | National Core Arts Standards." http://www.nationalartsstandards.org/content/conceptual-framework. Accessed 14 Nov. 2017.

Materials:

Digital Art Show - Virtual Reality

Portfolio of each student's artworks

Camera (iPad, digital cameras, cell phone devices)

Computer lab connected to the internet

Software:

Google Sketchup

Cospaces

Open Simulator- Diva Distro Build

Glass Fusing

Glass: clear squares 3x3," frit, stringers, noodles

Goggles

Glass cutters

Running Piers

Small cups of Elmers Glue

Toothpicks

Paper and foam trays to assemble glass on

Kiln

Copper tape

Colored wire

Pliers

ISTE Standards for Students²:

Standard 1: Empowered Learner

Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences.

1b Students build networks and customize their learning environments in ways that support the learning process.

Demonstrated by:

Students customizing their students customizing the learning environment by creating their own digital exhibit.

² "ISTE | Standards For Students." https://www.iste.org/standards/standards/for-students. Accessed 27 Jul. 2017.

1d Students understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.

Demonstrated by: Students are exploring emerging technologies through both OpenSim environment and Virtual Reality such as CoSpaces.

Standard 2: Digital Citizen

Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.

- **2a** Students cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.
- **2b** Students engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.
- **2c** Students demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.
- **2d** Students manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.

Demonstrated by: Students are allowed to create their digital profile as well as avatar. Before the students can get an avatar they have to sign the Rules of Agreement for the Islands. These rules include appropriate chat, and appropriate avatar interactions and display. Rules students are required to follow: http://islandsoe.weebly.com/ioe-rules.html

Standard 3. Knowledge Constructor

Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.

3c Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.

Demonstrated by: Students curating and displaying their artistic renderings and other artistic exhibits. Linking design with digital function

Standard 4: Innovative Designer

Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.

- **4b** Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.
- **4c** Students develop, test and refine prototypes as part of a cyclical design process.

Standard 6: Creative Communicator

Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.

- **6a** Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.
- **6b** Students create original works or responsibly repurpose or remix digital resources into new creations.
- **6c** Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.
- **6d** Students publish or present content that customizes the message and medium for their intended audiences.

Demonstated by: Student creating and repurposing their artworks. Creating unique and new ways to display and exhibit their work for other audiences such as students and parents.

Standard 7: Global Collaborator

Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.

7a Students use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.

Demonstrated by: Students work, collaborate, and share within the virtual environment, with students from differing backgrounds, in a live-time setting.