**INTERDISCIPLINARY ART EDUCATION**

Knochel, A. (2013). Histochemical Seeing: Scientific Visualization and Art Education. *Studies In Art Education*, *54*(2), 187-190.

This study considers the use of visual art in the scientific practice of histochemistry, the mapping of cells and tissues. The article outlines the connection that visualization has to both art and this scientific practice. The author primarily discusses the use of photoshop as a means for scientists to reproduce and document the information gleaned from their research. However, the medical community warns that there may be ethical questions raised using artistic visualization to record data. Real scientific research should be based solely on what is observed, and there is a question of reality when images have been altered or created solely by a program such as photoshop. Knochel proposes that the creation and manipulation of images of artists may offer insights to the scientific community, and at the same time, because of the ethical questions raised, that the art community may gain new understanding of observational and life drawing.

**STUDENT CENTERED CURRICULUM**

Sweeny, R. W. (2010). Pixellated Play: Practical and Theoretical Issues Regarding Videogames in Art Education. *Studies In Art Education*, *51*(3), 262-274.

The author of this article suggests that art educators should explore the ways in which their students’ lives are impacted by video games, and consider the possibility that aspects of videogame design and play could be incorporated into the art curriculum. Sweeny suggests that some videogame themes may become problematic for classroom use. Sweeny points out the potential for young students being exposed to hyper-realistic scenes that are potentially unhealthy for young people, specifically pointing out the *Grand Theft Auto series.* However, Sweeny also points out several practical applications for using video games in the classroom. One example is by showing the various ways perspective is shown in videogames, and how those compare to the varying ways multiple cultures have traditionally used perspective. Scroll-screen games such as *Super Mario Brothers* are likened to ancient Egyptian mural paintings. Incorporating these types of references may help students who are immersed in videogame culture make connections to art curriculum.

**CULTURALLY RELEVANCY OR VISUAL CULTURE**

Freedman, K., Heunen, E., Kallio-Tavin, M., Karpati, A., & Papp, L. (2013). Visual Culture Learning Communities: How and What Students Come to Know in Informal Art Groups. *Studies In Art Education*, *54*(2), 103-115.

This international study focuses on adolescents and young adults from five cities around the world, and their formation of informal Visual Culture Learning Communities, or VCLCs. A Visual Culture Learning Community is a group of people who form bonds, usually online through discussion boards and other social media sights. The research suggests that in a culture surrounded by information, these self-forming groups help students engage in learning and placing information into social context. Some groups are formed around long-standing ideas, such as ethnic culture or religion, where as some groups are based on common interests such as a particular movie or video game. VCLCs have their own types of language, costumes, and art. Cosplay and fanart art are products of VCLCs, as well as many types of freeshare media and apps. Members of VCLCs participating in the study discuss their involvement in the groups and their motivation for belonging to the group. They come together to learn as much about a particular piece of their visual culture as possible, and also how they can influence and enhance it.