Lacey Cheney

Professor Emerson

English 110-E

28 March 2019

Merging Two Cultures Into One

Have you ever taken art classes? Has it helped you think in new ways? Some might say that art is a diverse range of human activities in creating visual, auditory, and physical performances to express emotions and storytelling. They also might see science as the study of behavior of the physical nature of the world through observations and experiments. These two educational focuses to some might seem very separated, although Yo-Yo Ma sees the way they can complement each other as a equilibrium. Yo-Yo Ma, a cellist and songwriter, wants to help incorporate the arts and music into schooling systems today. Education in art and music is often looked down upon, as I have experienced myself. Ma brings attention to the fact that art and music can teach us to cope with tough situations. I agree with Ma, I believe that the power of art and science together, as an equilibrium, will have a vigorous impact on health care professionals. On a daily basis health care professionals, such as dental hygienist, can experience many unexpected situation that need to be handled in a calm way, and also a way that meets the patients needs. For example, a hygienist could find oral cancer while treating the patient during a cleaning. In this situation a hygienist needs to think creatively on how they are going to handle this situation. Introducing art into the sciences can give a well balanced education to possible future health care professionals. The way that incorporating the arts into the sciences can help

healthcare professionals by thinking creatively, taking a step back and attacking each problem in way that each patient needs, resulting in better care for each patient.

The push to advance STEM to STEAM will have a strong impact on the education that healthcare professionals receive, to help enhance their empathic consciousness. As a dental hygiene major, I find that learning art and music could help improve the care I will be giving to patients in the future by allowing myself to put myself in my patients shoes and image myself with their disease or illness. Developing a knowledge for music and art can help health care providers explore emotions through creating art., instead of only focusing on critical thinking straight out of the textbook. As a current student health profession major, I relate to Yo-Yo Ma's argument, "empathic thinking is something that is severely missing in education today that is only STEM oriented" (Ma 2). In high school I was in a science based LNA program, in this program we mainly focused on physics, anatomy, medical terminology, and statistics. My last two years of high school were so surrounded by scientific based courses, I was never able to explore any art programs. I feel like the lack of art education that I did not receive has set me behind in the health field. Coming to UNE, I have been given the opportunity to enroll in an art course. I know what you are thinking, some health majors should explore art to practice on art models of either teeth or the body, such as plastic skeleton figures to help learn the anatomy of the the body and mouth. Although, incorporating the arts into science majors is much more than that, it is about exploring the feelings that art allows you to explore. In my art class, printmaking, as Ma would say, I put my "empathetic thinking" to use to allow myself to create a "new consciousness" by allowing me to embrace a variety of emotions instead of hiding from them. In art class, I focus on how different shades of colors make me feel and really analyze the story that

I see behind each image. Through art class, i've realized that not everyone reads each chapter of the story the same way. This skill, I find, could help me connect with my patients feelings in the future, and even assist with coping with life or death situations.

NHIAA is the New Hampshire Institute of Art. I have several classmates from high school that now attend this school. Their majors range from ceramics to photography and included in their circumulum, is science based courses, like Anatomy and Physiology. Steven Pinker, a Canadian-American cognitive psychologist and popular science author, would argue against NHIAA curriculum. Pinker would disagree with combining the studies of science and art because he believes that art is error prone and has nothing in common with the sciences. He believes that "Most of the traditional causes of belief- faith, revelation, dogma, authority, charisma, conventional wisdom, the invigorating flow of subjective certainty- are generatory of error and should be dismissed as sources of knowledge" (Pinker 5). What Pinker means is that art leads to "illusions, fallacies, and superstitions" that aren't accurately backed up with knowledge out of a textbook. (Pinker 5). Pinker believes that people should stay away from information that has no backbone as to why it is. Pinker states, "In making sense of our world, there should be few occasions in which we are forced to concede 'it just is' or 'it's magic' or 'because I said so" and this is what Pinker believes a lot of artist do when expressing their work.

Pinker is someone who speaks very retrospectively by mentioning people who he believes were "creative thinkers" from the 1600's. Pinker believed what made Rene Descartes and Rousseau creative thinkers was by "contributing to mathematics, physics, and physiology" (Pinker 1). Although, Descartes and Rousseau were by Pinkers definition of "scientist," Descartes was also a cosmologist and Rousseau was a composer. As a cosmologist, Descartes

was exposed to lots of models made by artist to help study the placement of the planets and the galaxy. Rousseau as a composer had a passion for music, Ma stated that "in music there are patterns and sound" (Ma 5). From music, it could be possible that Rousseau found patterns in music to help explore the meanings of his experiments in a different point of view. Even within the minds of the "best thinkers" art has had an effect on their work in the scientific field. Cubism is a word that Lehrer spoke a lot about, he states that "cubism seems to have nothing in common with modern physics," but it does (Lehrer 1). Cubism means art, movement, shape and how they are not looked at all in the same perspective, this is the same in art. Art of all kinds is looked at from different views form everyone's personal lens. While looking at "The Couple In The Street" created by Charles Angrand, one might see a loving couple enjoying a joyful spring day, although one might see the couple walking away from a sad situation such as a funeral or a hospital visit. The colors and movement of the painting change the way each person's views the story created by Angrand. Since the colors are a dark yellow and gray, they can really influence one's feelings when viewing the piece.

Holism is the idea that systems and their properties should be viewed as wholes, not just as a collection of parts. Lehrer, the author of "The Future Of Science... Is Art?" argues that the "combination of art and science can help scientist develop an open mind" (Lehrer 7). A way that Lehrer suggest how this open-mind is developed is by better understanding holistic properties. Lehere believes that neuroscientist and physics should be able to understand that before you break something apart, it helps to know how it hangs together. (Lehrer 3). An example of holistic is health care that focuses on the health of the entire body and mind and not just specific parts of the body. In general this is mental, emotional, spiritual, energetic health and physical wellness.

In the health field, a dental hygienist needs to study how the teeth grow in, before going assigning braces. Dental hygienist and many other healthcare professions need to start from the bottom up. Art is a culture that is very familiar with starting from the bottom and building their work up. When in my art class, we are told to sketch a few ideas, from those ideas we allow ourselves to move forward with an even bigger image from that initial small idea. In Neuroscience and Physics, most scientist start with a big idea and never work their work up, they become stuck because they never started from a small idea. Although, there is a solution for this, incorporating art into neuroscience and physics will allow scientist to see within these "blind-spots," as Lehrer would say. As said in Lehrers article, "right now science is widely considered our sole source of truth" but if we incorporate the two, art and science, instead of allowing them to compete with each other any longer, art can help science see in those blind-spots and come up with new ideas for experiments that may not work, but at least helped trigger some untraditional ideas.

So why is learning the importance of art and music important to the sciences? Inviting arts into the science process will place us in a better position and help create a more well rounded person by developing empathy. Like the famous Cellist, Yo Yo Ma says "empathy comes when you understand something deeply throughout arts and literature and can thus make unexpected connections" (Ma 2). Art and music can teach us to cope with tough situations and help us express our emotions. I find that learning art and music could help improve the care given to patients from health care professionals like myself as a dental hygiene major. As a primary health care dominant University, I feel that UNE should take charge of making every major's curriculum require art. This will allow UNE students to give their future patients the best

empathy patient care in their future health professional careers. A way UNE has already developed a powerful way to develop an understanding of art and science together is by having such a diverse study abroad program. Studying abroad is a rich way to experience the way different cultures care for their patients, express their care through their art, and develop an open-mind for their research and discoveries. Traveling abroad can not only teach us that different cultures treat art and science in different ways, but that art and science as an equilibrium can help us all see through a new lense. The power of art and science together as an equilibrium will have a vigorous impact on health care professionals. If you are a healthcare professional, consider embracing the culture of art to allow yourself to develop an emotional consciousness, encourage the development of cultures and traditions, and help develop and open-mind.

Work Cited

- Lehrer, Jonah. "The Future of Science...Is Art?: To Answer Our Most Fundamental Questions, Science Needs To Find A Place For The Arts." *Seed* (2008): 1-7. Print.
- Ma, Yo-Yo. "Necessary Edges." In *Emerging: Contemporary Readings For Writers*, 3rd. Edition. Ed. Barclay Barrios. Boston: Bedford/St. Martin's, 2016. 258-261. Print.
- Pinker, Steven. "Science Is Not Your Enemy: An Impassioned Plea To Neglected Novelists,

 Embattled Professors, And Tenure-less Historians" *Edge* (2013): 1-6. Web.

 https://newrepublic.com/article/114127/science-not-enemy-humanities. Accessed 6 Mar.
 2019.