Technology Exploratory Project

The future is limitless with these technologies in our society: videos, 2D materials and regenerative medicine. I was drawn to video because entertainment industry is always developing. Not only for the entertainment of society, but also helped in our safety. 2D material is an advancement that many people do not understand but utilize today. Regenerative medicine is very essential to humankind and making us healthier, which is why I was drawn to this technology.

**Video** (19th century)

Video was invented in 1888, it’s an electronic that shows motion picture and later involved into cinematic. Video was devised for entertainment purposes; it effected many people throughout history. The majority use it for entertainment, while few use it for advancement in other fields that are helpful to people. Video was used for educational purposes that gave people a better understanding through visual effects. Many people explored video and what it was doing to society. An article by Adams and Hamm said, “We live in a society in which knowledge, generated by electronic technology, has changed our relationship to traditional patterns of moral development” (Adams and Hamm, 1988). Video could be seen as helpful or detrimental to the user depending on how you used it. Video created jobs for people as it developed. People loved the variety of entertainment. During a time, it was natural for every household to own a television and watch video. It changed culture because it was a norm to have and talk about video. “As technology keeps growing, political and economic leaders have utilized cinema in changing and shaping people’s outlooks either for their own benefit or for the benefit of the people. Quality translations are also readily available and extremely affordable for everyone these days, which makes it easy for filmmakers to reach their target audiences from all corners of the world in their mother tongue” (Morris, 2020). People’s need for video made a larger society for the industry. New forms of genres for video were created and it became revolutionary.

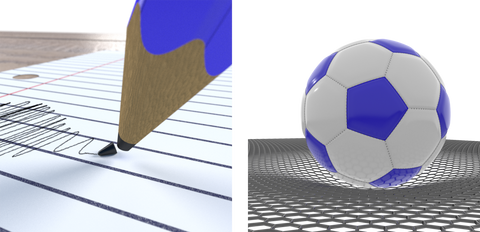
Video did have negative effects and if one watched for too long it was detrimental to their health. People were invested in video that they would lose focus of things around them that was important which included themselves. Society was able to develop video to the extreme that it was society itself. Videos became integrated into our lives and surveillance was born.

(Banksy, 2004)

Video is not only used for entertainment purposes but for other gains. The advantage of using video to further products or even people for elections plays a part in the political stage. This is important because video takes advantage of us because we are susceptible when we are not thinking. When we see video as entertainment, we forget other motives that drive the video to our lives and which in turn is a significant social dilemma we face.

**2D Material** (21st century)

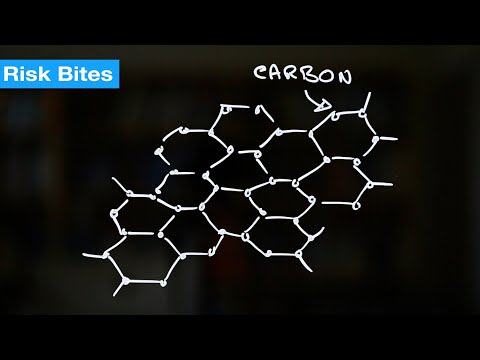
Graphene is a single or few layer atoms that create a stronger material. The purpose was to create lighter and stronger material.



(Osilla, 2022)

The picture on the left represents graphite which breaks easy compared to graphene on the right. Graphene can also convert light faster than you are receiving the data. Artificial Retina was created from 2D material. Artificial retina is an implant that activates retinal neurons which allows a blind person to see. These advancements are affecting society and improving daily life of individuals. 2D material is also used to make phones, sports equipment, and many other things we have in our everyday life.

We rely heavily on 2D material today. A book on 2D material said, “The multifunctional property enhancements already demonstrated with graphene-based fillers, coupled with their potential for low cost and large-scale production, may expedite the applications of these nanocomposites as well as their transition to the marketplace” (Ashutosh and Mikael, 2016). Graphene is used to make newer gadgets which is being commercialized to consumers at an alarming rate. The creations from graphene have pushed us away from our cultures by making us devoted to these objects. Studies are being produced about Graphene. It states graphene introduced to the environment is toxic to organic matter.

[](https://www.youtube.com/embed/-Puec2aLy10?feature=oembed)

(Undefined [Risk Bites]. “How Safe Is Graphene?” 2021)

Most people do not know that graphene is produces toxins depending on if the graphene has a chance of being detached. The greed of the few is releasing these manufactured items on our communities. The money that is being made from graphene is too significant to stop. It is very hard to stop something that’s integrated into our lives already.

**Regenerative medicine** (Future)

Regenerative medicine is an artificial processing of cell or tissue to help heal the human body. It essentially heals people when nothing else can be done other than waiting for a donor or death.

A picture containing diagram

Description automatically generated

(Yodosha Kenji, 2020)

By using stem cell to cultivate the replacement, regenerative or engineering of damaged tissue or organs in the human body. The final product is having a normal function of the tissue or organ. Someone needing an organ transplant can use regenerative medicine and regrow an organ. A journal in the national society of sciences said, “Considerable research has enabled the fabrication of sophisticated grafts that exploit properties of scaffolding materials and cell manipulation technologies for controlling cell behavior and repairing tissue. These scaffolds can be molded to fit the patient’s anatomy and be fabricated with substantial control over spatial positioning of cells” (Mao and Mooney, 2015). Having control of cell and tissue inside our bodies is the next step in the medicine field. People will not have to wait for someone else to die to get a transplant.

The cost is exceptionally low compared to a transplant, hundreds of thousands of dollars to a few thousand dollars. Regenerative medicine uses embryos that come from women with informed consent. Stem cell is then made from embryos and human tissue. The predicament is using these eggs for stem cell research which can create human life to save a human’s life. The line between people who approve and do not approve splits society and people’s culture.

[](https://www.youtube.com/embed/7QfHsS4Y_L4?feature=oembed)

(TEDxTalks 2020)

This tedtalk explains the advancement of modern medicine but warns of providers without scientific proof. People are being taken advantage of for money and a growing market for unproven regenerative medicine is unsafe. This could be one of the most powerful political and social tools used because research shows it can help someone double or even triple their life acceptancy. Most people are taking advantage and using unproven stem cells. Problems still arise with regenerative medicine, but its result can save an incalculable number of lives.

I am drawn to video the most because I can comprehend it easier than other methods of communication. Video is something we do not think too much about and use it for entertainment. While some are focused on innovative technologies, I am always thinking about what we can do to expand Video. I plan to use video for my presentation and expressing not only the uses of this tech but how it effects people. Video has always been something I was interested in getting involved in since I was young and will take with me even after the presentation.

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