

Nature of Science and Mathematics

Analyzing the Presence in Everyday Communication

Jeanette Valdez

Methods of STEM Education

Professor Annie Arnone

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The article that I have choose to analyze is about the debate on how heavy screen time (television, video games, cell phones & computers) rewires young brains. Is the research Good or Bad?

While reading this article I found that scientists are studying the risks of long term screen time and its effects on the young developing brains of children. Scientists argue whether the long term effects have shown the brain to be overly stimulated. (CCMS's construct viable arguments and critique the reasoning of others). Therefore, as a result much more stimulation is needed to receive the attention of the child. Which then has an adverse effect on the child in the real world.

Jan-Marino Ramirez, director of the Center for Integrative Brain Research at Seattle Children's Hospital suggests that it could help children in the real world that is full of stimuli. However, she also believes that this change in the brain can cause ADHD/ADD which can lead to attention deficits, learning disorders, and behavioral issues. Ramirez came to the conclusion based on her empirical evidence (NGSS's) of what was observed from a study done on mice. This article also addresses questioning the natural world based on the NGSS, because it stated how

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the mice reacted less stressed in an environment that usually would cause them stress.

Next, the input of Leah Krubitzer, an evolutionary neurobiologist at the University of California, Davis. Her observation lends to the NGSS's "knowledge is open to revision in light of new evidence". Her view is that the over stimulated brain prepares the child for an increasingly fast-paced world.

Finally, Gina Turrigiano, a brain researcher at Brandeis University suggests that parents have to be aware of their children individually and how their effected by screen time because every child reacts to situations differently. This article also tried to look for and express the regularity in repeated reasoning (CCMS). I believe it did this by trying to find what the reasoning was behind too much screen time and its effects. The article in its entirety addresses the CCMS of making sense of the problem and persevering in solving them.

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Part A

NGSS practices

- Scientific Knowledge is based on Empirical Evidence
- Scientific Knowledge is Open to Revision in Light of New Evidence
- Science Addresses Questions about the Natural and Material World

Part B

Common Core Mathematics Practices

- Make sense of problems and persevere in solving them
- Construct viable arguments and critique the reasoning of others
- Look for and express regularity in repeated reasoning