

Science Literacy
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One part of my daily routine is searching for the latest scientific discoveries. Biology, medicine, mathematics, space, new materials or inventions, archaeological sites, and many more keep my mind inquisitive and curious. In a previous article (or two), I shared about the benefits of continued reading and learning. It can be easy to learn about things that motivate us. Whether it is the positive motivation of learning a new recipe or the negative motivation of wanting to better handle finances or cleaning, there are many new pieces of information and skills that have technical aspects to them. It is always nice to find an informative book written in an easy to understand style that makes it more accessible to a wider audience. Not everyone is a good writer or even speaker though. There are so many amazing discoveries that happen every week around the world (or even above it)! A majority of people don't know about them, and it is simply because they don't know where to find it or how to read it. Science literacy is the key.

Science literacy is more than just understanding jargon and terminology like “a homogeneous mixture of di-hydrogen monoxide and sodium chloride.” That's salt water. It also encompasses understanding how scientific writing is organized both in the way it is written and how it is classified or published. Science literacy isn't about understanding everything science related. It's about understanding how to successfully navigate writing that is science focused or written by scientists. Did you know that scientists have successfully created materials that are only one atom thick? Unless you saw a summary article in a newspaper or magazine, or are a scientist in that field, you probably haven't. Headlines can be great eye catchers but what does it even mean? What are the implications? How, if at all, will this affect my everyday life? I'm sure I'm not the first person to see an interesting looking headline and then my eyes glaze over as I read through the article, barely taking in the words on the page.

Technology has changed rapidly in the past one hundred odd years. With this change has come the ability to conduct new types of science, examine old paradigms, and refine our understanding of what we think we already know. Depending on the subject, there are many science books that by the time they are written and published, they are already outdated! From the time I took earth science in middle school to when I took geology in college, our understanding of the earth's interior had fundamentally changed thanks to advances in seismology. Pluto was demoted from being a planet! The existence of black holes and gravitational waves were confirmed. The higgs-boson particle was found. Scientists are starting to 3D print human tissue. A fully voice controlled computer assistant named Alexa, Cortana, Bixby, or Hey Google is available like on Star Trek. The archaeological site Gobekli Tepi in Turkey is altering our understanding of the history of civilization. Just like how the date that humans first came to North America has been pushed back by thousands of years, or the field of underwater archaeology is asking more questions than giving answers. The world is full of great discoveries!

Science Literacy takes practice. It also helps if you have someone to help you find what you're looking for or better yet, helps you develop the skills to find it on your own. Here at the New Ulm Public Library, we're happy to help any way we can. Whether that's finding "Chemistry for Dummies" or "Non-Newtonian Fluid Mechanics and Complex Flows," the library is always a great place to start your next reading adventure.