

Science Is Elemental: Update #2

06/17/22

New name, new efforts

Over the past three months, I have interacted with many friends, former colleagues, new connections, and family members. Thank you all for the amazing ideas you have shared, for keeping me honest about how I present and think about this work, and your continued support of my ideas. If I have not yet spoken to you about my efforts, please contact me. I would love to hear your ideas.

These interactions covered a considerable amount of material, but the two themes I will talk about in this update are: 1) Science needs to be introduced and emphasized as early in elementary school as possible, and 2) People need to understand scientific processes and why the scientific method matters to develop trust in the (peer-reviewed) results they hear about.

Taking these two themes together, if science is introduced early and taught often, and with appropriate standards, our schools will more likely graduate citizens who can discern good science from bad and use critical thinking to make informed decisions as voters and members of society. That, I think, is a worthwhile goal of this effort.

I am always welcome to more ideas from all, and of course, contributed content. If you have additional ideas, or comments on any of the updates, please email me at annmiller168@gmail.com, or at ann.miller@scienceiselemental.org Also, please check out the new Science is Elemental blog at scienceiselemental.blog

Mission: Change science education to encourage more understanding of and trust in the scientific process by all high school graduates, through starting science education in the early grades



To form a non-profit

*Yes, I plan to:
current progress*

Because some of my initiatives will require much more effort and funding than I can do or provide on my own and will not necessarily fit into the purview of existing nonprofits. I will form my own.

As you can see from the new logo, the name of the nonprofit will be Science is Elemental.

I have a preliminary budget and I am working on forming a board, with a focus on science educators, and certain key skills such as law and accounting.

The next step will be to start the application process with the IRS.

Current updates on efforts

Please note the addition of an added effort since the last update, and the removal of the early books idea, as those organizations are already making that happen.

- 1) Develop a clearing house that includes science educational content available on the web, as well lists of national, state, and local upcoming decisions related to science education: Status: I am partnering with Chemists Without Borders, chemistwithoutborders.org, on a pilot for this project. Look for more to come!
- 2) I decided that the next best thing to the limited science education in elementary schools is to bring science to kids' other activities. I call this the Science of Soccer because soccer is all about vectors. With a few minutes of experimentation in angles and force per season, kids could gain a feel for the meaning of these terms long before they see them in HS Physics class. The figure on this page shows the science associated with many kids' activities.
- 3) Top Gun Academy summer enrichment program. Status: I am looking for a potential venue, with a stretch goal of starting in summer 2023. On hold as summer camps are swamped right now.
- 4) Work with Society for Science archived articles to engage students Status: assessment of archives completed; Upcoming poll of science teachers to see if it will be useful to them.



Other *pro bono* work

Highlighting charities

In addition to my efforts regarding science education, I have been volunteering my skills as an analyst to several nonprofits. I found two of these through the Taproot Foundation (taprootfoundation.org), which connects nonprofits with skilled volunteers.

Through Taproot, I now work with Saving Jane www.savingjane.org. They are a counter-trafficking committed to ending all forms of these crimes through raising of the public's awareness, education, the transformation of lives of impacted individuals, and the creation of systems, technology and policies to protect and support impacted individuals or prevent the formation of social conditions conducive to trafficking.

Other countertrafficking organizations include:

Shyne (shynesd.org) is a survivor-led foundation with the mission is to serve and lift survivors into economic independence.

Gracehaven (gracehaven.me) was founded in 2008 to strategically care for young survivors of human trafficking and help prevent others from falling victim through: comprehensive community case management, community education, and safe house services. Their goal is to give life giving hope and healing that foster change and gives an opportunity for youths to thrive.

