

SCIENTIFIC LITERACY AND NGSS: AN EDUCATIONAL LOVE STORY!

BY SAM ANSALDI, (VIA WILLIAM SHAKESPEARE)

BALCONY SCENE, ACT 2, SCENE 2

NGSS.

But soft, what light through yonder window breaks? It is Scientific Literacy and the light is the sun, which indecently is a large star at the center of our solar system filled with hot plasma that warms our planet from a distance of approximately 93,000,000 miles away.

Arise, fair sun, and kill the envious moon, who is already sick and pale with grief because he believes that there is a difference too great between fair Scientific Literacy and I, NGSS. While we may appear separate and unconnected, our fates are undoubtedly intertwined. For without Scientific Literacy we could not use the tools necessary to make our own set of educated inquiries regarding the questions that life surrounds us with. And without I, the NGSS, we could not acquire the basic skill sets of how those tools are used properly as well as how to build upon them in the future. Isn't that correct fair Scientific Literacy.

Scientific Literacy.

Ay me!

NGSS.

O, speak again, bright angel, for thou art as glorious as the way I can connect one subject type to the next using well described crosscutting concepts. For example, I have the ability to take a Disciplinary Core Idea (DCI) such as LS1.B: Variation of Traits, and combine it with another DCI such as ESS1.A: The Universe and its Stars, through the Crosscutting Concept of Patterns. This process affords me the ability to combine introductory, grade appropriate topics that span across multiple subjects and can be built upon through advancement of grade levels, thus equipping the student with a solid learning foundation for future topic discussions as they are presented over their academic career.

Scientific Literacy.

O NGSS, NGSS! Wherefore art thou NGSS? Deny thy concept of those who wish to keep us apart, or if thou wilt not, be but sworn by my love of educating the public so that they may make well informed decisions regarding the everyday questions that life throws at them. I am here so that people can know the basics necessary to decipher questions proposed to them by industrial professionals, politicians, or even complex situations that arise in everyday life. I am a comfort level and a foundation that allows anyone who possesses my basic skills to ask and understand questions that need to be answered so we don't blindly walk into the future taking everyone else's "word for it". Will having me allow the average person to know the in-depth ins and outs of harnessing solar energy, probably not, but it will make them confident in asking questions such as "how much does current solar energy technology reduce everyday fossil fuel usage?", and "when making solar panels what type of material is used, and is it safely and ethically extracted from the areas in the earth where it is found?" Questions such as this reduce the amount of speculation associated with everyday practices and create an informed, intelligent society.

NGSS.

Shall I hear more, or shall I speak at this? Scientific Literacy seems to make such a good point that there truly isn't one of us without the other. Scientific Literacy needs me to prepare students with a basic set of skills that can be built upon over time. Luckily I can employ a three dimension system introducing students to a framework that combines Disciplinary Core Ideas, Scientific and Engineering Practices, and Crosscutting Concepts. This framework will gradually expand on previously learned scientific techniques as students' progress, all the while connecting them to subjects outside of the scientific field. Scientific Literacy is right; we do belong together, no matter what the people say.

Scientific Literacy.

But NGSS, tis but thy name that is my enemy: thou art thyself a set of standards, while I remain as a practically applied life strategy. Is it truly possible that we could be together as one?

NGSS.

I take thee at thy word.

Scientific Literacy.

What man art thou that, have I taught you nothing?

SCENE

- Select parts of the scenes portrayed in this document were adapted from the works of William Shakespeare's *Romeo and Juliet* balcony scene, act 2, scene 2.

