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Teaching Science Philosophy

There are many children in grades kindergarten through eighth grade that have a negative connotation with science. This is brought on through the attitudes of their teacher and peers. I believe that it is up to the teacher to create a positive atmosphere in the classroom in order to help students develop a positive relationship with science. Science through a Christian perspective can help students form a greater appreciation for His creation. Therefore helping the students grow in their relationship with God. Obviously, there are also ways that students in a public school benefit as well. They can understand how the world around them functions and explain why things in our world occur.

Students should also be exposed to many scientific beliefs. In order to be contributing members of society, they need to have the background knowledge of many different beliefs. This allows them to be more understanding of their peers when communicating their own ideas. Exposing them to different scientific beliefs also gives them the opportunity to form opinions and encourages them to form logical arguments to support themselves. The main debate that occurs in science is evolution versus creationism. There is strong chance that these will come up as a debate in a future classroom. In order to effectively teach in this way, the teacher must present the material in a way that does not persuade the student to believe one thing over another.

In a lot of science classes, there is usually a lot of lecturing done by the teacher. This does not help students form personal connections with the material. The students will then not be able to retain the new concepts. According to Sara Bernard, “relevant, meaningful activities that both

engage students emotionally and connect with what they already know are what help build neural connections and long-term memory storage” (1). It is important that the teacher incorporates many visuals and hands on experiments that help the students further understand the material. The visuals that are used should be something that is utilized in everyday life. This will encourage them to form connections with the material.

There should also be many experiments that are done by the students. However, it is important that the students know why they are doing the experiment and how the concepts apply to the experiment. This may have to be done through some lecturing, but it is important that the students understand the purpose of the experiment. Otherwise the connections will not be made and the meaning will be lost. One way in which this can be done is by the teacher providing an example of the experiment with a verbal explanation as they go. This gives students the visual to keep them enticed and interested while hearing the reason for the experiment. Another way is through self discovery and asking the students to make the connections themselves. For example asking, “Where do you think we would see this experiment in our daily lives?” can encourage self discovery. This makes the concept more applicable to their lives and commit it to memory.

Also these experiments should be able to serve as an assessment. Science assessments do not always have to be given in terms of pencil and paper. Experiments that are done individually with an oral representation can also help the students express their understanding of the material. It is important to give students the opportunity to be assessed in different ways to accommodate their learning styles.

Science should be taught with the accommodations of all learning styles. Howard Gardner’s multiple intelligences include: visual/spatial, bodily-kinesthetic, musical,

interpersonal, intrapersonal, verbal, logical-mathematical, nature (Lane, 1). This gives all the students an equal opportunity to get the most out of the material. It is hard to accommodate all the learning styles in every lesson. This means that when the teacher does individual assessments, they may need to have some one on one with certain students and explain concepts in a way that suits their needs.

Works Cited

- Bernard, Sara. "Science Shows Making Lessons Relevant Really Matters." *Edutopia*. N.p., 01 Dec. 2010. Web. 05 May 2016.
- Lane, Carla. "Gardner's Multiple Intelligences." *Gardner's Multiple Intelligences*. N.p., n.d. Web. 05 May 2016.