

Frame for Science Instruction

I have chosen the [science center project from ED617](#) , to demonstrate my proficiency in science instruction. I installed an exploratory station in my practicum classroom where students could experiment with weights and pulleys. I set it up after we had already done a lesson on pulleys which entailed using an on-line simulator on "Explore Learning.com.©" This lesson featured hands-on learning and learning through inquiry. These are two important elements of science instruction (Reitinger, Haberfellner, Brewster, & Kramer, 2016). The science center had information, tools, and a questionnaire which allowed me to gauge student understanding and participation. Results showed the students gained understanding of the function of pulleys from the use of the science center.

I have been teaching in a German Immersion school and will continue to be a partner teacher on the English side at a Spanish Immersion school. My partner teacher teaches science in the foreign language. Though I do not currently teach science as a subject, it is my job to help my elementary students gain science literacy (Glaze, 2018). I do this through reading instruction using books about scientific topics as well as current events discussions and inquiry (Butler, 2000). I coordinate with my partner teacher to determine what science topic they are covering. I then use different modes to cover the science topic on the English side. This helps to fill any gaps in understanding from when the concept was introduced in the foreign language. One of the ways to accomplish this is by reading picture books or selections from the curriculum anthology that feature the topic at hand (e.g. volcanoes, earthquakes, or changes in matter). Another way to help my students with science literacy is by utilizing snack time to play TedEd© videos or BrainPop©

videos that teach science and math concepts in a fun and engaging way. My students get curious and informed while they eat their snack.

One of the traditions I have created in my classroom is to read *Snowflake Bentley* by Jaqueline Briggs Martin, on the first snowfall of the year. While this is a lovely picture book and an intriguing life story, this book offers plenty of opportunity to ask students math and science questions to make them think. It may seem like we are reading a picture book, but through inquiry, we are also doing science (Reitinger, Haberfellner, Brewster, & Kramer, 2016). We follow up our discussion with construction of 3D snowflakes that we hang from the classroom windows and ceiling.

Whenever there are scientific events in the news, we discuss it my class. Earthquakes and hurricanes around the world prompt my students' curiosity and often times they crave information not only to satisfy that curiosity but also to put their minds at ease. Understanding where and how these natural phenomena take place eases fears about what could happen to them in the event of an earthquake in their own backyard (Paulu, Martin, & Lehr, 2005).

Whether we are learning reading, math, science, or social studies, my students learn to give evidence based answers. This is at the heart of science literacy and part of my efforts to churn out well-rounded, critical thinkers (Gillies & Baffour, 2017).

[Link to Science Center Artifact](#)

References

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