ENVS Giveback Piece

After completing my ENVS 3991 final assignment regarding the burning of creosote-soaked railway ties, I shared it with my grade, seven class, as a current event lesson. I was curious to see how young people reacted to a local environmental dilemma. Most of the students are familiar with the Williams Lake area, as it is a mere one-hour travel north by car from 100 Mile House. Many children often have bonfires on their properties, or when they are camping with their parents, so their first reaction was to ask “what the big deal was” about burning some wood. They figured that it would be a better way of disposal than filling up the local landfills.

One of my students had asthma, and several had seasonal allergies, so I asked them what makes it difficult for them to breathe. They all replied that smoke, dust, and pollen caused them difficulties. I then encouraged the students to consider the following question, “Could you imagine how tough it would be to breathe if you lived in a place that had smoke-filled air every single day? Also, what would happen if this smoke contained chemicals that bothered your allergies or asthma even more than regular smoke?” The class had not considered this before and decided as a group that having smoky air every day might not be pleasant for their lungs or their sense of smell.

I prompted further critical thinking by asking the students what would happen if the ashes from burning the railway ties ended up in a farmer’s field or a local river. A student replied that ashes are suitable for the soil. I countered with the fact that these ashes could contain burned creosote. The student made an educated guess that this might not be healthy for growing crops that people eat. Since many of my students enjoyed fishing, I posed the question about chemical-filled ashes ending up in local rivers and, subsequently, the lakes where they catch and eat fish. The students now discussed how fish could get sick if they somehow “ate” the ashes by eating food in the lake, and then they could get sick if they ate the fish. (In Science, the class had recently studied about primary and secondary consumers). I also mentioned how First Nations would be affected if their fish (food and economy) supply became depleted.

As our discussion closed, the students realized that although burning railway ties seemed harmless enough, there are many things to consider that may harm the environment and the people who live in it. Discussing the topic of burning chemically treated wood encouraged my class to apply critical thinking and contemplate the consequences of specific actions. By sharing my research and inquiry, I helped to make my grade seven class aware of the many effects that one seemingly harmless act can impose on a local ecosystem.

Personal Connection:

As I assembled this giveback piece, I discovered that my great grandfather, who worked as an inspector for the Canadian Pacific Railroad, had a job to inspect all of the rail ties laid at the time. As a boy, my dad went along with him on occasion, and recently told me a story of how he was allowed to help to stamp and code the ties by using a double-sided hammer to mark the rail ties as “passed inspection.” The stamp was an imprint on the end of the wood tie and read “PLIB” (Pacific Lumber Inspection Board) along with a code number. At the time, the only concern was to get the railroad built. No one had any idea how controversial disposing of a seemingly harmless preservative would be in the future of British Columbia.