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# Climate Literacy and Curriculum development for Climate-Change Education

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The purpose of climate-change education is to foster the public's climate literacy. Climate Literacy Network has defined climate literacy as the understanding of one's influence on climate and climate's influence on oneself; and on society. The understanding climate science is the prerequisite for this definition. Thus we need to define climate science. Climate science consists of basic climate theory and climate change. In this article, we focus on the climate change.

The first step for climate-change education is to accept that global warming is happening now. Here the term "global warming" is the observed climate-change. The second step is accepting the effects of climate change. Social resistance to these two steps is minimal. That is because we observed melting mountain glaciers during the last decade. Also, we experience weather pattern changes. However the cause of observed climate change is in constant dispute; whether it is artificial, natural, or both.

We can't prove the absolute cause of the observed climate-change; but this also doesn't support the belief that one can emit limitless carbon dioxide ($CO_2$). The concentration of greenhouse gases as part of the atmosphere is the major factor of climate change. The increase in greenhouse gas concentration does have an effect on the global-temperature of this planet. However, it is not possible to detect any effect of a small change in greenhouse gas concentration due to the complexity of the earth's climate-system. Therefore, we cannot attribute observed climate-change to the increase of atmospheric $CO_2$ concentration.

The discussion of global warming started with the doubling of atmospheric $CO_2$ concentration since the pre-industrial era. The atmospheric $CO_2$ concentration is still predicted doubled by the end of this century if we continue to use fossil fuel. The doubling of atmospheric $CO_2$ concentration is expected to raise the global-temperature by a degree, based on the theory of atmospheric science. There is no doubt about effects of doubling of atmospheric $CO_2$ concentration on the global temperature.

My proposal for climate-change education is focused on climate change at the end of this century. We should focus on this century's end versus the past hundred years. That is because we cannot make precise medium-range weather forecasts but we can make a climate prediction at the end of this century. We should consider the next generation versus our own future. And this is the foundation for climate-change education.