EDITORIAL

Teaching climate change - a fad or a necessity?

The term “global warming” was not used commonly until about 1989. This is in contrast to discourse on the impending ice-age in the 1970s. Following the Greenpeace report on global warming in 1989 and the first Intergovernmental Panel on Climate Change (IPCC) report in 1990, global warming induced climate change quickly became a hot topic. However, the volume of published works about teaching and learning the topic did not increase until after 2000. In a content analysis of articles published in IRGEE between 1992 and 2009, there was a steady and distinct increase in the number of articles on the topics of sustainability, pollution and global warming; an increase from 1 article in volumes 1 & 2 in 1992, to 12 articles in volumes 17 & 18 in 2009 (Kidman & Papadimitriou, 2012, p. 7). This significant increase in interest is also seen in the political, economic and social discourses on climate change in the last two decades (Chang, 2014).

While one can argue that it has become more “fashionable” to talk about environmental topics such as climate change, there is no denying that the impacts of climate change necessitates further understanding of the phenomenon, so as to adapt to or even mitigate these impacts. One possible way to look at this trend is that the increased reporting of the problems of climate change raises human awareness of the issue, which potentially perpetuates more discussion on the topic across various media channels. However, it could also be that the topic is itself important enough and the discourse necessary enough for our common environmental wellness that it has resulted in the sustained trend of higher publication volume. Or perhaps the question of whether it is a fad or necessity should be addressed in terms of the nature of the discourse of climate change education, rather than the volume of discourse generated. In other words, we should be interested in describing the scope of the climate change education issue rather than whether there has been more articles published on the topic.

Whether students engage in the climate change controversy, or adopt a stand and take action for it, most students are unable to see how this is relevant to their lives (Chang, 2014). The apathy is aggravated by the abundance of contradicting discourses that the public is exposed to. For instance, at the recent G20 meeting in Brisbane, Australia’s Prime Minister Tony Abbott asserted that global warming induced climate change is not an issue worthy enough to be included, so it would not be on the G20 agenda. This is in stark contrast to the content of a lecture delivered by the United States’ President Obama at University of Queensland just prior to the G20 meeting, who said that it was an issue and it was going to be included in the G20 agenda.

The confusion generated by conflicting stands as presented in political discourse is made worse by the public’s inability to observe and remember the short-term impact of climate change. People will tend to only remember weather anomalies of recent days, or catastrophic real world events, but gradual or moderate changes in weather patterns tend to go unnoticed (Ungar, 1992). Together with conflicting political discourses of climate change, this characteristic of human memory provides excuses for people to dismiss talking about climate change or worse, remain apathetic.
Climate change is perceived as a distant threat when compared to immediate concerns such as unemployment or rising living costs. Perhaps an extended exposure to alarmist climate change discourse has raised anxiety and fear, making people insensitive to the issue (O’Connor, Bord, Yarnal, & Wiefer, 2002). This, when coupled with the public’s inaccurate and incomplete understanding about the issue, results in general apathy in people to take action to mitigate climate change. In fact, some teachers chose not to adopt a clear position on climate change in class for fear that they have misunderstood the debate (Seow & Ho, 2014). Tilbury and Wortman (2006) argue that a sustainable environmental future can only be secured only if we engage “students and adults at all geographical and cultural scales” (p. 206). Mostly disguised as environmental or sustainability education that has been infused or integrated in existing school subjects, the learning outcomes of such an approach are usually documented through ad hoc environmental awareness activities that are conducted outside of curricular time. With the exception of a few countries, environmental education, let alone climate change education have not been included as distinct units within school curricular subjects (Chang, 2014).

The geography classroom is the best place to teach about climate change as it affords both the space and time for students to interact with the topic within the disciplinary domain of the geography subject, connect related concepts of the human—environment interaction and make sense and reflect on the topic through formative assessment of their own learning. School geography provides the opportunity for students to engage the issues through the debates over whether climate change is indeed taking place and to help them understand the complexity of the science of climate change. Further, the topic remains highly relevant to geography and environmental education, as students need to engage the topic critically, make sense of what they know and make certain decisions about their lives. In reviewing the literature on climate change education, the key issues seem to focus on providing exemplars how climate change discourse is enacted in existing curricula or addressing misconceptions about the science of climate change. While it is important to share best practices in curriculum development and enactment for teaching and learning climate change, and address issues of student misconceptions, there is a dire need for discourse on teaching students to engage the climate change issue directly.

For a start, there is a need to describe what is meant by learning about climate change--a need to distinguish between the cognitive and affective learning outcomes, and possibly any consequent change in the learners’ behavior. Having defined clear outcomes of what teaching climate change will look like makes it easier for educators to identify what learners know and what they do not. This helps teachers in developing useful instruction for the classroom and designing meaningful assessment tasks. In short, the discourse on teaching and learning climate change need to address broader issues of curriculum and assessment, include empirics that will inform both research as well as practice and address the concerns of developing more critical learners that can engage climate change issues and take action for them.

I was once asked why I chose to become a geography teacher and my answer was that this was the one subject that I knew I could not only teach a subject, but that I could truly teach a person. If we truly embrace the notions of learning about human—environment interaction, space, place, movement and time, then the geography subject allows us to teach a person how to use one’s imagination and to be able to think and reason and to decide on how to live based on one’s understanding of the environment. In other words, we imbue what Solem, Lambert, and Tani (2013) describe as GeoCapabilities for the learner. Perhaps the question at
hand is not whether it is a fad or a necessity to teach about climate change, especially given the unprecedented rate, scale and complexity of climate change related issues occurring. Rather, one cannot help but wonder how the discourse in geographic and environmental education should develop to help us teach the issue of climate change. The approach of teaching climate change would need to balance between developing learners who can critically engage new information about the phenomena as well as being empathic individuals who are committed to take action to make their living environment a better one.

References


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