

The Earthquake Teaching Tool: A Simple Convection Current Demonstration Set

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Abstract

After the finishing of the conventional instruction, high school students still held alternative conceptions of the earthquake causes. For instance, most believed that rainy area occurs earthquakes more than that of dry area because wet soils can slide easier than dry soils. This can generate earthquakes easier as well. Moreover, they believed that earthquake occurrence depends on the topography, particularly; earthquakes often happen near the islands. To correct and enhance students understanding of such concept, we suggest a convection current demonstration set. It consists of very basic materials such as a beaker, vegetable oil, glittering flakes, plastic sheets and an alcohol burner set. Additionally, we apply the demonstration set in the 5-E model of the inquiry-based teaching approach for earthquake cause classes. Initially, it revealed the positive findings of both student conceptual understanding and the satisfaction.

Keywords : Convection Current, Earthquake Causes, Inquiry, Demonstration

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