



Enabling Educational System Transformation in Post-Conflict Countries: the Importance of the Interdisciplinary Practices in Re-orienting Teacher Services?

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Abstract

Although the idea of using analogic models of polymers to educate potential users about a set of biological content is not new, the practical work described here go beyond simple interdisciplinary practice and support widespread and sustained implementation of the new biology programs in the secondary school of East Timor. Two sessions with teachers were described within the interdisciplinary perspective between biology and chemistry disciplines. Various molecular conformations can be shown through the analogic paper models of polymers, and snapshots of important conformations can be incorporated into the classroom for further discussion and annotation. Each of the analogic models of proteins or polysaccharides or nucleic acids explored in this report is an attempt to use science models to improve the quality of educational resources available outside of the classroom to foster student engagement with ideas and concepts.