Incorporating Engineering and Three Dimensional Learning into the Science Classroom

Saturday March 4, 2017 | 8:30 am – 12:00 pm
Southern Connecticut State University Jennings 111

Presenter: Gail Emilsson, Connecticut Center for Advanced Technology

Objectives: Participants will be able to successfully incorporate an engineering design problem into a unit of study by practicing with an oil spill cleanup kit and using it to plan for three-dimensional learning.

AGENDA

8:30 – 8:45 Sign in, welcome, breakfast | Carol Jenkins, EO Coordinator, CRISP

8:45 – 9:15 Initiation with Four Corners activity and writing initial arguments

9:15 – 10:00 Oil spill cleanup demonstration, explore current events, DCI ETS1.A – Defining and Delimiting an Engineering Problem, SEP1 – Asking Questions and Defining Problems, Venn diagram of NGSS, ELA, and Math practices

10:00 – 10:15 Break

10:15 – 10:45 Introduction to CRISP “Bioremediation: Oil Spills” kit, DCI ETS1.B – Developing Possible Solutions, revise arguments, final Four Corners prompt

10:45 – 11:15 Discuss links from activity and share out:
- Other DCIs (PS, LS, or ESS) that could be learned with oil spill activity
- DCI ETS1.C – Optimizing the Design Solution
- ETS2 – Links Among Engineering, Technology, Science, and Society
- Nature of Science
- Crosscutting Concepts

11:15 – 11:45 Collaboration and Planning

11:45 – 12:00 Wrap up, Engineering Resource List, and Survey
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