The Climate Literacy and Energy Awareness Network (CLEAN)

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Abstract

It is important that we prepare tomorrow’s scientists, decision makers, and communities to address the societal impacts of a changing climate. In order to respond to, manage, and adapt to those changes, citizens of all ages need accurate, up-to-date information, knowledge of the sciences, and analytical skills to make responsible decisions and long-term resiliency plans regarding these challenging topics. The Climate Literacy and Energy Awareness Network (CLEAN, http://cleanet.org) is 1) providing teaching resources for educators through the CLEAN Collection and pedagogical support for teaching climate and energy science; and 2) facilitating a professionally diverse community of climate and energy literacy stakeholders, called the CLEAN Network, to share and leverage efforts to extend the reach and effectiveness of climate and energy education. This presentation will provide an overview of the CLEAN web portal and techniques we have used to market it. We will showcase the CLEAN Collection, which is comprised of 700+ resources (curricula, activities, videos, visualizations, and demonstrations/experiments) that have been reviewed for scientific accuracy, pedagogical effectiveness, and technical quality. Recent activities of the CLEAN Network will be highlighted. We will present findings from our web analytics work, which monitors visitor use of the CLEAN web portal. Through analytics data, we will show evidence of successful CLEAN marketing efforts. The results of our recent pop-up survey, which has been completed by CLEAN visitors from six continents, will also be discussed. Survey results will provide detailed information about how our audiences use the web portal. We anticipate that our insights from the CLEAN network can aid other climate and energy education programs in effectively increasing the visibility of their vital work.
CLEAN Review Process

A rigorous and transparent peer-review process is used for the CLEAN collection. Resources that are relevant to one of the climate and energy literacy principles and useful for grade levels 6-16 are reviewed. In 2018, a peer review of 720+ resources led to the publication of eight CLEAN Teaching Guidebooks. The peer review process was developed by the Climate Literacy and Energy Awareness Network (CLEAN). Resources are reviewed by a panel of educators and scientists and assigned a peer review grade level (K-12) and whether it can be relevant to each of the five climate literacy principles. Each page summarizes the framework of the Climate Literacy and Energy Awareness Network (CLEAN). Teaching Guidance is provided following the teaching collection's introduction. The CLEAN Collection is located at cleanet.org and is syndicated to the NOAA Teaching Climate portal, climate.gov/teaching, as the official federal government collection of climate and energy teaching resources. The CLEAN Network is a community of climate and energy literacy stakeholders. A rigorous review process ensures ongoing quality of collection.

CLEAN Supports Climate & Energy Education

CLEAN Collection: Contains 720+ peer-reviewed educational resources such as activities, lab demos, visualizations, and videos for grades 6-16. This work has been supported by the National Science Foundation under grants #0937941, #0938020, #0938051, by the National Oceanic and Atmospheric Administration (NOAA) grants # 0938020, #0938051, by the National Aeronautics and Space Administration under funding number NNX16AB97G, and by the Department of Energy.

CLEAN Network: A professionally diverse community of climate and energy literacy stakeholders. Activities: Weekly teleconferences and presentations; Vibrant email list; Workshops and networking opportunities at large events and conferences. The CLEAN Network is free to join and is open to anyone.

CLEAN For Educators

Alignment with Next Generation Science Standards (NGSS)

CLEAN Collection: Guides for Teaching Climate and Energy Science: Pedagogical support for teaching climate and energy topics, including misconceptions and best classroom practices.

CLEAN Collection search option:

Open text search: grade level – resource type – Climate Literacy Principles

Energy Literacy Principles – Use of Scientific Data – Regional Focus – Topic areas

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