



2022 HAWAII UNIVERSITY INTERNATIONAL CONFERENCES

SCIENCE, TECHNOLOGY & ENGINEERING, ARTS, MATHEMATICS & EDUCATION JUNE 7 - 9, 2022  
PRINCE WAIKIKI RESORT, HONOLULU, HAWAII

DEVELOPING CROSS-CURRICULA ACTIVITIES  
FOR REMOTE TEACHING OF EARTH AND  
ENVIRONMENTAL SCIENCE WITH PRIMARY  
SOURCES FROM THE LIBRARY OF CONGRESS



KOPTEVA, IRINA

GEOGRAPHY AND ENVIRONMENTAL STUDIES DEPARTMENT  
UNIVERSITY OF COLORADO  
COLORADO SPRINGS, COLORADO

Dr. Irina Kopteva  
Geography and Environmental Studies Department  
University of Colorado at Colorado Springs  
Colorado  
ikopteva@uccs.edu

***Developing Cross-Curricula Activities for Remote Teaching of Earth and Environmental Science  
with Primary Sources from the Library of Congress***

Abstract

STEM curriculum benefits from including primary source analysis. The approach integrates science and society studies, engages students in active learning and inquiry, develops critical thinking, advances spatial skills by investigating the real-world situations, as well as it accommodates various learning styles and provides multiple perspectives by utilizing sources of different formats. Teaching with primary sources provides opportunities for both teamwork and individual research where students form opinions and construct statements while connecting primary source evidence, such as the COVID pandemic impact on the environment. Cross-curricular connections and discussions flourish when science and social studies students investigate together the evidence and impacts of climate change and/or water pollution on legislation and society.

The Library of Congress digitized collection is colossal and diverse. Teachers must have professional development opportunities to learn how to use primary sources effectively in teaching science. The University of Colorado at Colorado Springs team developed and conducted the *Remote Teaching Earth and Environmental Science with Primary Sources* workshop, which is now incorporated as a stand-alone course into the Douglas County School District professional development system for future use. The course laid the foundation of educational resources that can be used in both face-to-face and online or remote settings. The workshop participants have developed lesson plans which integrated primary source analysis and continue to educate students and disseminate information to their colleagues about primary sources and LOC resources. Overall, teaching with primary sources increases the satisfaction of both learners and their teachers.