

COSEE-China Planning Workshop

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Goals: To exchange information focused on ocean science education in the United States and China and to explore the possibility of establishing a Center for Ocean Science Education Excellence in China.

INTELLECTUAL MERIT

This proposal fulfills several of NSF's overall goals. First, this workshop enables US ocean scientists and educators to advance their work through collaboration with China and, by involving graduate students and post-doctoral fellows, helps to ensure that young US scientists gain professional experience beyond US borders. Second, this workshop epitomizes the integration between research and education. The COSEE network is driven by its goals of developing effective broad impacts of ocean science and integrating cutting-edge ocean research into educational programs and activities. Finally, this workshop is a first step at sharing best practices between two significant countries in a field (science education) that has not traditionally shared all its learning through peer-reviewed literature. Innovative and effective educational programs should result quickly from this collaboration.

This proposal offers substantive learning by comparing US educational practice and institutions with Chinese ones, forms the basis for a strong foreign partnership, increases the availability of a diverse array of educational resources, enhances the capacity of US ocean educators by supplying a rich set of examples, new environments, and diverse applications, and provides new testing grounds for educational models developed in the US.

BROADER IMPACTS

The proposed workshop has broad impacts well beyond the scope of the proposed one week of activities. First, by exposing US students and teachers to Chinese culture, these life experiences are likely to change the global perspective of these influential individuals. The workshop will result in new learning about educational practice in both the US and China that will impact the educational practice of the individual participants and their personal networks. The workshop will provide the building blocks for new collaborations in research and education between participants and their networks. This workshop and the report back to the COSEE network should inform the national COSEE network about opportunities in China as well as best practices in a different educational system. Finally, by incorporating underserved populations in the workshop, diversity among US and Chinese participants will help make the learning robust and widely applicable while ensuring best practices in education for ALL students are employed.

RATIONALE:

The United States and China face some of the same fundamental challenges in educating their public about the importance of the oceans in their everyday lives, the role of the ocean in climate change, and the value of supporting ocean science research. The general populations of the United States and China are not "Ocean Literate", do not see how their lives are affected by the ocean, and are not educated about the ocean in school. By expanding the COSEE network from 13 Centers in the US to establish a COSEE-China, the ocean education and research communities in both the United States and China will benefit.