

## **The Interplay of Science Education and Cultural Context**

The Interdisciplinary Science and Engineering Partnership (ISEP) is a K-12 STEM education program focused on research-based professional development. Service learning students support ISEP's mission by mentoring students across twelve high-needs schools in Buffalo, New York. As mentors at Public School 31, we have researched techniques to cultivate students' information literacy. We have found that activities – such as making flowcharts, annotating articles, engaging with local professionals, and creating PowerPoint presentations – can help students develop information and cultural literacy. Similarly, this winter we spent a month teaching at the Calcutta Rescue Center, a non-governmental organization that aims to provide children from impoverished districts in Kolkata a full-scale education. As mentors at Calcutta Rescue, we helped students develop English grammar and conversational skills; learn how to interpret Bengali, English, and Hindi literary works; and practice writing letters to pen pals at Public School 31. In the future, we will continue developing a partnership between the two schools. Students will exchange letters and communicate through online media, which will facilitate cross-cultural communication about issues present in their communities. Ultimately, we will create a global learning environment and encourage students to not only re-imagine their own cultural context, but also use their cultural literacy to create innovative solutions to issues present in their everyday lives.

*Key words: Calcutta Rescue, communication, cultural literacy, high-needs schools, ISEP, science education*