Visiting Geoscientist

We wrote this guide to inspire geoscience professionals and assist them in helping to provide Earth science enrichment for students, especially in school programs at the K-12 level. We have grown increasingly aware of the tremendous opportunities for enrichment, and the equally large resource represented by professional geologists and geophysicists. We hope to reach scientists working in resource and environmental companies, research institutes, state and federal agencies, and even college and university departments. We also hope to connect with teachers and help them make the most of the volunteers they meet.

We know that many geoscience professionals already visit classrooms, lead student field trips, and even involve K-12 students in research, and we strongly applaud their efforts. We hope this handbook can offer them some additional ideas and resources to enhance their experience. For those that have yet to face a group of curious students, we want to encourage that first step, and make the initial encounter as fun and effective as possible.

The *Enrichment* section begins with a discussion of what effective modern enrichment can be like, including key components and why Earth science enrichment matters. The *Pedagogy* section discusses how K-12 students learn science best, with an emphasis on discovery and inquiry. In the *Curricula* section, we review the current state of Earth science in K-12 education, from curriculum issues to science frameworks and standardized testing. The *Classroom Tips* section provides ideas to help get into (and out of) the classroom, and how to make the most of the time spent there. The *Investigation* section provides some sample activities, material lists, and other resources. Finally, *Resources* provides valuable resources that you may use to supplement your outreach experience.

You may also download a PDF version of the handbook here (21.59 MB)