

Using the Mid-Continent Rift to make plate tectonics "real" for Midwestern students

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A major challenge for geoscience educators in the Midwest is that plate tectonics, one of the grand unifying themes of the earth sciences, seems very remote. It describes interesting processes like volcanic eruptions, mountain building, and rifting that happen in far-away places that most students have not seen. It is hard for educators to connect these concepts to students' experiences. The North American Mid-Continent Rift System (MCRS), the dominant geologic feature of the mid-continent, offers an opportunity for students in the Midwest to observe the effects of plate tectonics close to home. Unfortunately, the MCRS is surprisingly unrecognized outside of the geological community. Hence we seek to generate material for both formal and informal educators, as well as the general public that explore this extraordinary feature, its tectonic significance, and the ongoing studies of it. In addition, we will design and facilitate a series of workshops for both formal and informal educators that focus on the educational opportunities provided by the MCRS. This workshop series will be delivered in collaboration with Education and Outreach Committees from EarthScope, UNAVCO, and IRIS. A one-week workshop for formal and informal educators will take place at Michigan Technological University in Houghton, Michigan in 2014. This setting provides opportunities to highlight well-exposed features of the rift. Four one-day follow-up workshops will be held at schools, museums, or science centers in Illinois, Michigan, Minnesota, and Wisconsin; specific locations are to be determined.



Figure 1: Frame from video about the MCRS developed with the EarthScope National Office
http://www.youtube.com/watch?v=JPtWu_WATXs