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For Immediate Release

Seismograph Installed, Christian Brothers High School Students Collecting Real-Time Data on Seismic Activity

Although students in David Levasseur's advanced physical science classes are not scheduled to study earthquakes, tectonic plates and seismic waves until later this spring, they have already begun collecting seismological data. Thanks to a grant from the Incorporated Research Institutions for Seismology (IRIS), Levasseur now has a fully operational seismograph in his classroom.

Since receiving the instrument in September, the seismograph has recorded data from 24 earthquakes from locations ranging from Northern California to Chile. The data collected is stored in a dedicated computer and transmitted to IRIS where information from all participating schools is posted in real-time and stored in the world's largest seismological data archive.

Christian Brothers High School is the only high school in Sacramento with the equipment on hand. For more information on IRIS and the data collected by Christian Brothers High School, please visit <http://www.iris.edu/hq/ssn/schools/view/cbca>.

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Budding Seismographers

At Christian Brothers, students learn earth science by monitoring earthquakes

By Vanessa Diffenbaugh

Days after the Haiti earthquake, students at Christian Brothers High School were still experiencing aftershocks.

Christian Brothers is the only Sacramento high school with a working seismograph in its science classroom. The device, an ASI, or entry-level seismograph, is part of the IRIS Seismographs in Schools Program. Sponsored by the National Science Foundation, the program was created to bridge the gap between science classrooms and the real world and to create an international educational seismic network.

"The seismograph can pick up things we can't feel," explains CB science teacher David Levasseur, the teacher who applied for the grant and received training through the IRIS program. "The Haiti earthquake came into our seismograph about 30 minutes after it occurred in Haiti."

the science classroom can see and manipulate the data.

"The seismograph doesn't give you a location," says Levasseur. "You need three machines to triangulate the data. Kids learn to plot earthquakes using the information from our readings and triangulating with data from other school's websites."

A map of the world posted on the science classroom is peppered with small circular stickers noting the location of dozens of earthquakes the seismograph has picked up since September.

Another freshman, Colleen Donovan, has spent much of her free time plotting earthquakes, and her careful triangulation is responsible for many of the stickers on the map. "My friends and I love to go in and plot the earthquakes," Donovan says. "I've learned all kinds of things: where the earthquakes are happening, longitude and latitude, the tectonic plates and stuff like that."

Levasseur points to the map. The



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"The seismograph can pick up things we can't feel," explains CB science teacher David Levasseur, the teacher who applied for the grant and received training through the IRIS program. "The Haiti earthquake came into our seismograph about 30 minutes after it started in Haiti. The students were able to come in and see the earthquake patterns on the screen and follow the aftershocks."

Freshman Alexa Bacher is fascinated by the seismograph.

"After Haiti, we came into class at break and looked to see what was happening," she says. "It's just really cool to learn about earthquakes all over the world and to actually see them when they are happening."

Levasseur was inspired to apply for the IRIS grant to try to make science more real for his students.

"I teach earthquakes in my freshman science class," says the 11-year veteran teacher, "and I wanted



David Levasseur talks with students by the seismograph used to monitor earthquakes. The seismograph can be seen in the foreground.

to make the material come alive for students. When I first started teaching about earthquakes, I could ask my students, 'Where were you in the 1989 earthquake?' and we would have a lively discussion about earthquakes and their impact. Now, my students were born after 1989, and many Sacramento kids have never felt an earthquake."

The seismograph has definitely made earthquakes more real for students. It uploads readings onto a computer screen—everything from a classroom door banging shut to real earthquakes in Haiti, Chile and Northern California. The data is then uploaded onto a website.

Students sitting at computers circling

Donovan, has spent much of her free time plotting earthquakes, and her careful triangulation is responsible for many of the stickers on the map. "My friends and I love to go in and plot the earthquakes," Donovan says. "I've learned all kinds of things: where the earthquakes are happening, longitude and latitude, the tectonic plates and stuff like that."

Levasseur points to the map. The stickers are clustered in a smattering of locations, leaving most of the map untouched. "My students have discovered the seven plates on their own," he says. "I haven't even had to teach them about it yet."

Lorcan Barnes, the school's president, is thrilled about the addition of the seismograph to the science classroom.

"The faculty at Christian Brothers is extraordinary in that they look to find unique and creative ways to engage our students," says Barnes. "The seismograph takes earth science

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