The United States–Japan Foundation, The Mountain Institute, and the National Park Service collaborated to create the Sister Mountain Curriculum Project. The Mountain Institute's Alton Byers is project director and works with Lee Taylor of the National Park Service. The Sister Mountain Curriculum Project teaches middle and high school students in the US and Japan about two iconic mountains, Mount Fuji and Mount Rainier. These famous peaks serve as a lens to focus student awareness of the physical processes of mountains, their ecology, and human culture. Students gain insight into the value of mountains and the importance of environmental stewardship. By highlighting similarities and differences between these two volcanoes and their people, the project also enhances international understanding. In August 2010, six Japanese teachers visited Mount Rainier to meet with American teachers and review the lesson plans they had developed. In 2011, the Japanese teachers will host a workshop in Japan for the US teachers. The Sister Mountain Curriculum will be completed in 2011 and available to students and teachers on the web.

In what follows, Lee Taylor interviews Peter Conrick and Setsuro Kobayashi; the American and Japanese Teacher Ranger Teachers who participated in the Sister Mountain Curriculum Project. Lee Taylor is the Chief of Interpretation and Education at Mount Rainier National Park. She has worked for the National Park Service for twenty-six years in ten different national parks.

Lee Taylor: Why do you think young people should learn about Mount Fuji and Mount Rainier?

Peter Conrick: Overall, the importance of making a connection to the natural world is critical for young people. Mountains have always inspired people, and these two mountains are both icons in their own right. Both mountains have compelling scientific connections, but they also have intriguing human stories. By studying Rainier and Fuji, our students will come to a clearer understanding of environmental, social, and political issues across national boundaries. They will begin to understand that beautiful places need protection, wherever they are on earth. Moreover, they will come to see themselves not just as Americans or Japanese, but as joint custodians of those treasured places.

Setsuro Kobayashi: Symbolic places like Mount Fuji and Mount Rainier can provide a huge impression and attraction to students and will increase their desire to learn. Both mountains are symbolic to their countries/states and have a strong impact because of their beauty and the richness of their natural world. These mountains also have an economic impact as well as cultural impact. Teachers need a variety of field materials and information in order to teach their students science, geology, history, culture, tradition, and environmental protection. This workshop provided these. School systems need professionals who have knowledge and experience in these fields. Both mountains have rich resources of material and provide professionals with field experience.

One of our main purposes of the workshop for the Sister Mountain Project was to build relationships and provide for interactions between the two countries. Developing lesson plans, sharing ideas, and exchanging lesson plans was an ideal way to interact with each other and for the two mountains to assist in connecting teachers in each country more easily. I found many differences between the two countries/mountains, such as our educational systems, how we teach “protect and preserve” concepts, and the differences in our schools. To compare these differences among the students or make them aware of these differences will be a very interesting topic in my class and will broaden the student’s knowledge and understanding. Thus, I strongly believe it is very important to study about Mount Fuji and Mount Rainier.
Lee Taylor: What are some of the benefits of studying the ecosystems of these mountains from a comparative perspective?

Peter Conrick: There are a number of benefits of studying these two mountains from a comparative perspective. First, students will realize that scientific inquiry, methods, and procedures are applicable across the world. Second, these ecosystems have similar designs, and it is valuable for students to see the adaptations that the mountains’ species have made for each life zone. They can also compare the impact of human activities on each ecosystem and propose solutions to better understand and preserve these natural resources. Such solutions can lead students to a more effective global focus in resolving environmental problems. Furthermore, the two mountains need to be studied geologically, as connected parts of the Pacific Ring of Fire.

A great example of one benefit we have already seen because of studying the mountains from a comparative perspective involves looking at the effects of human waste on each ecosystem. The staff at Mount Rainier National Park learned about the effectiveness of using composting toilets from Mount Fuji, and we have begun installing them at Mount Rainier using the Japanese technology to reduce waste.

Setsuro Kobayashi: Both mountains have scientific as well as cultural richness; both are well known throughout the world and are loved by local communities as well as native people. Students can compare the differences as well as similarities in nature, culture, and history in broad visions. To be able to succeed with these activities, teachers from both countries must understand the similarities and differences between the two countries. This workshop was very useful and meaningful for me to better understand this. If we compare and contrast other mountains as we develop these lesson plans, the materials will be even richer.

Lee Taylor: Do you think the study of these two great mountains will have applicability for several academic disciplines? If so, why?

Peter Conrick: Absolutely. The most rewarding and effective method of studying these two mountains is to take an interdisciplinary cross-curriculum approach. Recent brain research on how we learn best points to the importance of making connections between different disciplines. Students can learn so much from thinking and creating in a variety of disciplines. The best way to study these mountains is by offering a variety of scientific, literary, historical, and artistic activities.

Setsuro Kobayashi: Throughout the workshop, I have learned that there are few differences in the teaching styles and the subject content between the two countries. Although I found out that American teachers do focus more on ways to increase their students’ motivation and inspiration, US teachers care about students’ motivation instead of just teaching content. US teachers are more focused on ways to increase their students’ awareness of the subject matter and ways to make the materials more attractive to the student. To be successful with these teaching techniques, the teachers have
to be confident as well as knowledgeable. Teachers themselves must enjoy
their topics, so they can share their excitement with their students.

Some of the lesson plans that I’ve learned during the 2010 workshop
are easy to demonstrate in my class in Japan, especially some of the field
trip lesson plans that are very easy to adapt. Now that I understand the
thought and passion that went into creating these US lesson plans, I real-
ize they can be adapted for use in Japanese classes in science, history, lan-
guage arts, and on field trips.

Sometimes it is not easy to understand the whole meaning of the les-
son plans by simply reading them. This will require future discussions
when we post these lesson plans on the website. I have learned the mean-
ing behind these lesson plans during this workshop, on the field trips, and
in our small group discussions. When we upload these lesson plans onto
the website, it would be good to include short movies as supporting doc-
uments. These supporting materials will have a strong impact in helping
students better understand the materials.

At the end of the workshop, as we sat together on the banks of the river,
holding each other’s hands, Lee Taylor played her guitar for us as Fawn
Bauer, the Park’s Education Specialist, gave us each an opportunity to share
our thoughts on what had inspired us during that week. This activity made
a great impression on me. As a Japanese teacher, I would never have
thought about doing this.

Lee Taylor: How have you grown as a professional educator from partici-
pating in this project?

Peter Conrick: The Sister Mountain Project has been a wonderful experi-
ence, because it has allowed me to bring together so many professional and
personal interests: love of the outdoors and especially mountains, hiking,
climbing, and a long time interest in teaching about Japanese history and
society. The Sister Mountain Project has enabled me to combine these

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passions and bring them to my students. I am excited about the opportu-
nity for my students to make contact with the Japanese students and share
common projects. This will allow them to connect in the same way that
I’ve been able to connect with my Japanese colleagues.

Setsuro Kobayashi: Japanese and American Teacher-Ranger-Teachers
(TRTs), have different teaching backgrounds, teaching experiences and ed-
ucations, but we have the same feelings, the same passions. The Japanese
National Park Service and the American National Park Service manage
their parks differently. Yet we are the same! We all love our mountains, we
care about nature, and we want to keep our legacy for generations after us.

If everybody in the world loves nature and wants to protect and pre-
sure it, the entire world will be enriched. As a teacher who is very close to
students and who is able to pass this message on to students, I would like
to continue our mission to educate students about the importance of pro-
tecting and preserving these sacred places for future generations. To con-
tinue my mission, I would like to keep in touch with all the TRTs in both
countries. As a professional educator, I won’t disappoint the supporters,
partners, and donors who made this workshop successful.
Mount Rainier and Mount Fuji Online Lesson Plans

Mapping the Ring of Fire
This lesson, developed by Paul Tankovich who teaches Earth Science and Physical Science at Ridgetop Junior High School in Silverdale, Washington, is designed for geography classes in grades six through nine, although it can be easily adapted for the high school and introductory university survey levels. Portions of “Mapping the Ring of Fire” are also applicable to earth sciences classes. Students learn more about the geography and geology of the Pacific Rim through engaging in a variety of mapping and Internet-based assignments.

Mount Fuji and Mount Rainier: Creating a Sense of Place
Kevin Olson, who teaches World Studies and US History at Timberline High School in Lacey Washington, developed a high school social studies lesson that is designed for five, one-hour long class periods. Students analyze primary source documents, do historical research, and engage in classroom role-playing to understand the concept “sense of place,” using Mount Fuji and Mount Rainer as case studies.

Two Mountains, Two Peoples: Power Point Project
This lesson, developed by Peter Conrick who teaches Language Arts, World History, and Social Studies at Kamiakan Junior High School, Kirkland, Washington, is for high school students and language arts or social studies teachers. It has a strong humanities focus but strong economic and political components as well. Designed for five, one-hour periods, students examine paintings, photography, and literature, and learn about economic and political issues as they plan and construct Power Point presentations illustrating the impact of the two mountains on people who live near them.

Postcards to a Friend
This lesson by Everett Hill was adapted from an earlier lesson by Nicole Snyder. Everett Hill teaches Life, Physical and Earth Science, and Math at Sequoya Middle School in Auburn, Washington. “Postcards to a Friend” is intended for students in grades six through twelve. It could be used in either social studies or language arts classes. This is a practical, yet creative lesson that could, depending upon teacher planning encompass three to five one-hour classes. Students learn about Mount Rainier and Mount Fuji through taking a virtual trip to each site and writing ten postcards to a friend about their experiences with each mountain.