Experiencing and Teaching the Geography of Nepal

By Barbara Brower, Teresa Bulman and Gwenda Rice

PROGRAM DESCRIPTION AND GOALS

In summer 1997, thirteen elementary and secondary school teachers from Oregon participated in a month-long geography field program in Nepal. The “Teachers’ Workshop in Nepal” (TWIN Project), funded by the U.S. Department of Education, through Fulbright-Hays Group Projects Abroad and by the Oregon Geographic Alliance (OGA), Portland State University (PSU), and the Himalayan Research Bulletin, was developed and implemented by faculty at PSU, Western Oregon University, and Cascade High School in Oregon. Its goal was to expand participants’ understanding and appreciation of other peoples and places while providing hands-on training in techniques of field research within geography. Group Projects Abroad are intended to broaden and strengthen international awareness and scholarship in liberal arts and humanities; a particular target of the program in recent years has been K-12 education.

TWIN was intended to introduce teachers to Nepal and the Himalayas, and especially to the environmental and cultural complexities of the allocation and management of natural resources in Nepal. Such issues are particularly relevant to many of Oregon’s teachers. Oregon shares with Nepal a mountainous spine, high and dry desert, wet, green lowland, and productive inner valleys. A land of farmers, herders, and a skyrocketing population of city folk, Nepal, like Oregon, struggles to cope with accelerating change in society and economy. Nepal, like Oregon, must find ways to reconcile competing demands for the natural resources that support its people.

TWIN was planned (1) to give teachers an experience of another place and its peoples; (2) to prepare teachers to infuse their classrooms and curricula with new international studies materials and to share their experiences with the larger community; (3) to engage teachers in geography-based field work in the Himalayas, promoting an understanding of the environment and appreciation for resource use and conservation practices in Nepal, and providing a global context for Oregon resource questions.

TWIN was also designed to enhance teachers’ geographic knowledge. Since the inception in the 1980s of the twin stimuli of the National Geographic Society’s Geographic Alliance Network and the Goals 2000 federal legislation for implementation of national geography standards, geographic education in K-12 schools has been in the process of a comprehensive transformation. Teachers’ perceptions of geography are no longer confined to names of state capitals and mountain ranges, and teachers are being given access to the most up-to-date content and tools of the discipline. The result of the Alliance activity and the implementation of national and statewide geographic standards has been the development of programs such as TWIN.

The Oregon Geographic Alliance, established and funded by the National Geographic Society in 1986, was a key partner in TWIN, both in terms of funding and design. The OGA’s purpose is to enhance and improve geographic education in Oregon, in schools, and in the community. To this end, OGA has directed teacher education institutes, sponsored teacher presentations at national meetings, worked with teachers to develop model lessons and model curriculum materials, and contributed extensively to efforts in education reform in Oregon.

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Oregon teachers in particular were ripe for the experiential opportunities the TWIN Project provided. Many of Oregon’s teachers work at a great distance from Portland, the only large city in the state, and their access to people and resources from other cultures has been limited. In addition, Oregon property tax limitations, reducing school funding just when education reform has been mandated, have meant that teachers have fewer resources to teach an ever-expanding curriculum. TWIN has helped fill the breach by providing teachers with content, materials, and dissemination outlets. Teachers selected for TWIN were eager to commit not only to the rigorous field experience planned for Nepal, but also to the ongoing curriculum development obligations that followed.

DEVELOPMENT AND DESIGN OF TWIN

Geography educators have noted that “[w]orthwhile field experiences require an extraordinary amount of planning and preparation time,”1 and TWIN was no exception. Planning began more than a year in advance in order to bring the partnership together, identify sites and activities, organize affiliations in Nepal, make travel and accommodation arrangements, select participants, and plan long-term elements.

Field experience in Nepal, and development and dissemination of curricular materials constituted TWIN’s two major programmatic components. Project staff expertise encompassed cultural and physical geography, field techniques, geography education, and substantial familiarity with Nepal. TWIN was designed for fifteen participants, twelve teachers and three staff members—the optimum configuration for the complex itinerary. As a result of pretrip personnel changes, thirteen teachers, one of the original Project organizers, and a PSU graduate student substitute recruited in Nepal actually participated in TWIN’s field component; all three organizers are currently involved in posttrip development and dissemination of curricula.

Oregon teachers, regardless of discipline area or grade level, who had completed an OGA summer institute, were eligible to competitively apply for TWIN. The majority of teachers...
who participate in OGA programs have teaching responsibilities outside of geography, including subject areas such as history, English as a Second Language, earth science, biology, chemistry, special education, civics, mathematics, physics, environmental education, and preservice education. TWIN staff planned a wide variety of cultural and physical geography field activities, thus ensuring that teachers with primary teaching responsibilities outside geography would have experiences beneficial to their levels and subject areas.

**Orientation and Preparation**

Orientation focused on trip goals, travel logistics (health, safety, and equipment), cultural awareness, fieldwork, and background on Nepal and the Himalayas. Teachers prepared for the Project by reviewing a variety of materials on Nepal. In mid-May, 1997, the teachers convened for a one-day general orientation at PSU; in mid-July the teachers participated in a four-day orientation at the Malheur Field Station in eastern Oregon, a site chosen because it offered hikes at elevation, thus enabling the staff to identify problems associated with high-elevation trekking.

Participants were given a preview of Himalaya-related rigors and preliminary experience in how to use the field equipment and collect data. It ensured, further, that participants would be compatible, committed, and physically and emotionally up to what would be a very demanding experience.

Prior to the field orientation, the teachers were required to submit draft curriculum proposals consisting of model units and connections to state and national geography standards, and during the orientation, participants shared the units. Staff anticipated that most draft proposals would be radically altered upon the teachers’ return to the United States, reflecting the impact of their experiences and learning in Nepal. After the final orientation at Malheur Field Station, participants headed for Nepal under the direction of the Project organizer most involved in planning this part of TWIN.

**The Nepal Field Experience**

The Nepal experience was intended to provide a general understanding of Nepal and its extraordinarily diverse peoples and landscapes, coupled with a very particular encounter with one place—Sagarmatha (Mt. Everest) National Park —its resident people, and the issues of resource conservation and management played out there. Project timing was dictated by the Nepalese rainy summer season. Monsoon brings with it the possibility of considerable destruction and disruption (as an example: at the end of the TWIN Project, wash-outs of all principal roads cut off access to Kathmandu). By spending most of the time in the high mountains, TWIN participants were able to escape the monsoon’s most forceful effects. Summer offered other advantages. It is a productive time for the study of vegetation, slope processes, and weather. Monsoon also represents the slack time for the study area’s resident Sherpa people, who are preoccupied with tourists in the dry seasons; residents had more free time for interaction with participants.

Meticulous advance planning was put to the test in the field. That some plans were brilliantly realized, some failed utterly, and serendipity played an important role in the ultimate success of TWIN comes as no surprise to those who have planned international field projects, particularly in Nepal.

**Kathmandu Orientation**

The initial five-day orientation was arranged in conjunction with Cornell University’s Nepal Project. The TWIN teachers stayed in student housing in the ancient Kathmandu Valley kingdom of Kirtipur, where Nepal’s principal university’s main campus is located. Fed Nepali meals and ministered to by Cornell-Nepal Project staff, the group ventured from Kirtipur to explore Kathmandu further while also attending daily Nepali language lessons and a variety of lectures by Tribhuvan faculty and other local experts. The group, accompanied by both professional guides and well informed university students, visited the major temple complexes and historic sites of the valley.

In a first exercise in fieldwork, TWIN teachers were sent on a transect through Kathmandu’s palace square and rabbit-warren bazaar. Though government schools were on holiday, the group visited one of Nepal’s notable schools for girls, St. Mary’s, and Raato Bungala, an innovative private school modeled on the Banks Street School in New York.

For a group with very little experience of foreign travel, Kirtipur at first presented something of a shock: streets ankle-deep in flowing mud when it rained, dogs and cows vying for

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Parents arriving at Alameda Elementary School in Portland, Oregon, for Back-to-School night, walk by a display case en route to their children’s classrooms. The display, labeled “Nepal,” holds maps, bright prayer flags, a Sherpa doll, a Nepali topi (man’s hat), and children’s books—colorful, interesting and evocative objects collected and arrayed by second grade teacher Carol Davidson.

Leslie Simmons and Charran Cline teach high school in Eugene, an area of the state where a fading timber economy is being eclipsed in importance by growing tourism. Their students explore the parallels and contrasts between what tourism means to local communities with what their teachers show them about the impacts of tourism in the area of Mt. Everest.

Liz Gordon’s middle school students in far northeastern Oregon are farm kids. This year, they and all the other students in this small but cohesive district will be learning secondhand about Nepal as Gordon’s fellow teachers and the school librarian make Nepal the focus of their fall activities; Gordon provides them with a variety of materials as well as her own fresh memories.

space with people on narrow twisting lanes, people’s lives lived largely in public view. But Kirtipur, a town still flanked by rice fields and backed by hills, became a haven from the still greater noise, confusion, and strangeness of the fast-growing city of Kathmandu.

The Kathmandu orientation was very useful. University faculty lecturers offered comprehensive overviews of a number of important issues in Nepal, and provided opportunities for participant comparative thinking. Kathmandu, like Portland, must cope with its rapidly accelerating growth and demand for water and other resources. Conservation as constituted in Nepal must address many of the same concerns we consider in the United States, perhaps particularly in Oregon. Also, teachers were empowered for later adventures as they came to feel competent in coping with life in Kirtipur.

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**RETURNING TO THEIR CLASSROOMS**

The trek was planned as a gradual ascent up the valleys of Sagarmatha National Park that would acquaint participants with the complex interactions of human use and natural process in shaping a high-mountain landscape. Field exercises were to fine-tune the teachers’ observational skills while equipping them with techniques to bring home to their students. The trek was to alternate travel with work/rest days, and to take the group through changing vegetation zones, a number of Sherpa settlements, and to meetings with park officials and local villagers en route to a high point of about 16,000 feet.

At each stop, site surveys were planned to provide practice in field observation and the use of instruments. These surveys were designed to allow the teachers to collect information that would further their own understanding of processes in...
the natural and cultural landscapes, provide subject matter and techniques suitable for later classroom use, and provide data for research in, by, and about the park.

The surveys, grounded in a vegetation sampling strategy designed to provide instantly recognizable results to amateur biogeographers trying to make sense of vegetation patterns, called for a vegetation transect (to provide information on structure, cover and composition, and vegetation dynamics), and associated measurements of site variables (slope, aspect, temperature, humidity, wind speed, and soil temperature and pH).

Additional field exercises planned included simple field mapping and stream flow calculations. Cultural survey strategies, based on participant observation, were to be unobtrusive and sensitive to issues of privacy and cultural difference.

After a few discouraging days of attempting to carry out the field work agenda planned for TWIN, site surveys were dropped in favor of a less structured, observation-and-discussion-based analysis of cultural and natural landscape patterns and processes. Once in the field, given the physical challenges of long days hiking in a high mountain environment and with a whole new world to be explored and understood, field surveys on rain-pelted slopes of overwhelmingly diverse flora came to seem less important.

There was too much else to do, too many other experiences to come to grips with, too much else to be wondered at and enjoyed. Participants learned about biogeography, microclimate, and hydrology, but through observation and discussion rather than planned field exercises. For much of the trek, the group benefited tremendously from the insights and facilitation of a returning resident, Lhakpa Norbu Sherpa, also an official of Nepal’s Department of National Parks and Wildlife and Ph.D. student in Forestry at the University of Washington.

After three days of acclimatization and introduction to the Khumbu and the Sherpa world at Nauje (Namche Bazar), the group traveled up the Bhote Kosi Valley, stopping for a tour of a Tibetan Buddhist nunnery at Thamo, and stayed three days in the Thangmite area. There they visited the recently restored Thami Monastery and met its Abbot, investigated the cracked and leaking holding pond of a micro hydroelectric facility that now electrifies most Sherpa villages, and stayed overnight with Sherpa families. The group’s visit coincided with the Sherpa festival Pangmi, and group members capitalized on the opportunity to learn Sherpa line dances, record songs, and film special events—particularly make-believe weddings, complete with elaborate costumes—associated with this unusually festive time of year.

From Thangmite, the participants retraced their steps toward Nauje, and then turned to camp at the village of Khunde before continuing up the Imja Khola Valley. At Khunde, TWIN participants were given a tour of the Himalayan Trust’s Khunde Hospital and visited another Trust-initiated project in the area, Khumjung School. In scale and facilities, Khumjung School is quite unlike the other schools and adult literacy programs visited by the teachers. Participants also visited schools in Nauje, Thamo, Thami, Fortse, Pangbuje, and Lukla while trekking. TWIN participants shared resources brought from Oregon, and observed the educational setting and were able to compare education practiced in rural Nepal with Kathmandu and their classrooms.

From Khunde, TWIN members moved up the valley of the Ngodzumpa glacier in a carefully staged ascent to a high camp in a yak-herder settlement at 15,400 feet. Some of the group took the opportunity to climb still higher, to 17,000 feet on Gokyo Ri, and others ventured out onto the glacier. The group returned down valley to continue up the main valley of the Imja Khola to the village of Fortse, then on to camp above Pangbuje before returning to Namche via a visit to Thangbuje monastery. The group then descended again to Lukla, and experienced the minor monsoon miracle of an on-schedule flight to Kathmandu.

After these physical and emotional challenges, and faced with the task of assimilating so much new experience, participants welcomed the next phase of the TWIN Project: a week in Kathmandu. Teachers acquired additional classroom materials and explored the Kathmandu Valley further as they began pulling their experiences together into teachable units.

FOLLOW-UP AND DISSEMINATION

Upon their return to the United States in late August 1997, teachers began development and dissemination of model curriculum units. During the twelve months following the overseas experience, each teacher prepared a model unit (for in-class or field activities).
THE DISSEMINATION PROGRAM HAS THREE COMPONENTS:

1. National and international dissemination: The OGA is disseminating the model units to teachers (and others interested in curricular materials) nationally and internationally via the OGA homepage and through notices in the National Geographic Society’s national network of geography alliances.

   The OGA will support TWIN teachers (with funding and administrative assistance) in presenting model lessons at national in-services, presenting papers based on the Nepal seminar at national and international meetings, and developing Family Geography Night and other community-based activities tied to Oregon area studies. The OGA exchange program (with teachers throughout the Pacific Northwest and Hawaii) also serves to enhance dissemination within the Pacific Rim region.

2. National Geographic Society Alliance network: OGA, through its liaison at the Education Foundation of the National Geographic Society, will advise the alliance representatives in all fifty states, and Canada and Puerto Rico, of the model units developed by the teacher participants and make copies of materials available to the other alliances.

3. Statewide dissemination: The major statewide dissemination is through the OGA newsletter (sent to schools throughout Oregon, and to several hundred non-Oregon addresses) and through in-service presentations conducted by TWIN participants, each of whom is required to give in-services in Oregon or nationally. During the summer of 1998, TWIN participants had a reunion in Portland, sharing their teaching work with each other and with other OGA teachers.

   TWIN has also enabled teachers to organize materials around issues affecting Nepal to be studied by students and compared with similar materials organized around Oregon issues.

   For example, in August, 1997, The Oregonian reported on the proposed $9.1 billion project to generate power from Nepal’s Karnali River project, which would be one of the largest hydroelectric projects in the world. The project was to be developed by Enron Corporation, the same company which owns Portland General Electric, a major supplier of energy from the massive system of hydroelectric dams on the Pacific Northwest’s Columbia River.

   The generation of hydroelectric power in the Pacific Northwest is one of the most critical resource development issues in Oregon, pitting salmon, farmers, loggers, electricity consumers, and governments against each other. The Nepal and Oregon hydroelectric projects, especially in light of their common ownership, provide a unique opportunity for comparative studies.

   The teachers can also modify existing teaching materials, such as “Learning Activity: High Mountain Environments in Nepal and China,” and “Geography in the News: Disaster on Everest” to compare the Himalayas with the Cascades or other mountains of Oregon.

   Through its professional development programs, the OGA will continue to assist the teachers in their curriculum development and to assess the success of the Project.

CONCLUSION

The success of TWIN’s first goal, to provide an illuminating foreign-area field experience, appears to have been unquali-
fied as each teacher came away with a deeper appreciation of the geography of Nepal. While the level of participation in the second Project goal—field studies—varied, the model curriculum units being prepared indicate that teachers learned and applied geographic concepts in their Nepal field work. In addition, the teachers’ draft model units demonstrate a strong understanding of the national geography standards and Oregon geography standards.

The third Project goal, dissemination of model units and related materials, is underway. Within a week of their return, the participants established a website, complete with photos from the Project, and participant/staff teams gave presentations at the annual meetings of the Association of American Geographers and the Oregon Council for Social Studies. While such presentations are important, TWIN participants’ students will benefit now and in the coming years.

As one teacher noted, it was an incredible experience to actually see Mt. Everest after having run her fingers over a relief map of Nepal for so many years; another teacher gleefully wrote from Nauje that “We’ve been walking through streams, getting dirty, and having a rigorous time becoming one with geography.”

The Teachers’ Workshop in Nepal provided an opportunity for teachers to experience the geography of Nepal, putting them in a unique position to bring to their students what Salter and Salter refer to as the "wonder of geography": “There is a wonder to geography. It touches all of us. It touches so many strands of the world around us. And it can touch all of our students if we stay creative and provocative in our willingness to bring them to its understanding.”

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NOTES

REFERENCES


RESOURCES

CORNELL-NEPAL STUDY PROGRAM
Box 8452
Kirtipur, Kathmandu
NEPAL

NEPAL STUDIES ASSOCIATION
John Metz, President
Department of History and Geography
Northern Kentucky University
Nunn Drive
Highland Heights, KY 41099
606-572-5462

HIMALAYAN RESEARCH BULLETIN
Geography Department
Portland State University
Portland, OR 97307-0751
1-800-547-8887; ext. 5-8312

A SHORT READING LIST ON NEPAL AND THE SHERPA


POLITIES AND HISTORY


POPULAR INTERPRETATION


INTERNET RESOURCES ON NEPAL AND THE HIMALAYAS

HIMAL SOUTH ASIA
http://www.south-asia.com.himal
NAMASTE HOMEPAGE: http://www.interstep.co.jp/namaste/
POLITICAL RESOURCES ON THE NET NEPAL: http://www.agora.stm.it/politic/nepal.html

HIMALAYAN ONLINE NEWS SERVICE:
http://www.himonews.com/list_web site/internet_resources.html
NEPAL ADDRESSES:

SHERPA FRIENDSHIP ASSOC.:
http://www.bend.com/sherpa/sfa/SF_A_home.html

NEPAL HOME PAGE: http://www/ info-nepal.com
CENTER FOR SOUTH ASIA-UNIV. WISCONSIN:
http://www.wisc.edu/southasia
ASIAN STUDIES WWW VIRTUAL LIBRARY:

NEPAL WWW VIRTUAL LIBRARY:
http://www.catmando.com/nepal.htm

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http://www.gopher.cc.columbia.edu/ info-nepal.com
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www.south-asia.com/dotn/index.html