

## HISTORY

### **GEO: Teaching historical geography** *St. Mary's College of Maryland*

In their introductory Western Legacy courses, the history faculty at St. Mary's College of Maryland was faced with teaching freshman students—most of whom had limited geography skills—the role geography played in shaping the legacy of the Western Hemisphere.

According to Associate Professor of History Sam Lambroza, “Students didn't understand the fundamental principles of latitude and longitude and didn't have the skills to read a map. Many lacked knowledge both about site locations and about spatial relationships. They couldn't tell us the location of the International Date Line nor could they tell us if Moscow is further north than New York.”

To get students up to speed, faculty incorporated wall maps and overhead projections into class lectures and discussions. They assigned map-reading projects and outside reading on historical geography. With a high student-faculty ratio for the course, however, faculty were limited in the amount of individual attention they could give to students—and consequently students still had a tough time making connections between geography and history.

“The problem we faced was how to teach basic geography skills to such a large group of students and have them apply this knowledge to history,” explains Lambroza.

Lambroza thought a possible solution was to incorporate a software tutorial into the Western Legacy curriculum. Unfortunately, the software on the market was not customizable and either had little pedagogical value or was too simple or too complex for the department's purposes. In short, the department was unable to find a package that met its needs. Convinced that a software tutorial would be the most effective means to help students, Lambroza, along with Sunil Punnoose, director of academic computing, decided to design their own application for the curriculum. After evaluating several platforms, they decided to create the application using NeXTSTEP.

“NeXT has an easy-to-use graphical user interface, exceptionally good software development tools, and multimedia capabilities,” says Punnoose. “The object-oriented environment offers us the opportunity to share classes and objects with developers from other schools, thereby significantly reducing development

time for future modules.<sup>o</sup>

By the fall of 1991, Lambroza and Punnoose had created GEO: Teaching Historical Geography, a multi-module program for the traditional Western Legacy course. Now, the 300 students enrolled in Western Legacy each semester can log onto a NeXT machine in St. Mary's public access lab and, at their own pace, complete the modules available on GEO.

<sup>a</sup>With its multitasking environment and graphical interface, a NeXT machine running GEO provides an effective way for students to become comfortable with basic concepts of geography very quickly,<sup>o</sup> says Lambroza.

The introductory module of GEO uses text, graphics, and animation to teach students the structure and logic of latitude and longitude, as well as the difference between globes, projections, and site location. As students read through the interactive program, they are asked to complete a variety of tasks to enhance their knowledge of geography. For example, they learn how to construct a latitude and longitude grid and how to read map coordinates. Students are also encouraged to print out the module and bring it to class so instructors can refer to the GEO assignments in their lectures.

A second module incorporates text, audio, map graphics, and photographs to help students understand the rise of Naziism and the geography of the Holocaust. As students read through the narrative, they select maps and photos that help them better understand the spread of Naziism.

<sup>a</sup>The maps and photos give students a much deeper understanding of how Germany was able to invade and occupy most of Western and Eastern Europe,<sup>o</sup> says Lambroza. <sup>a</sup>The program also helps them visualize the tremendous efforts expended by the Nazis in transporting Jews and other victims to ghettos and concentration camps.<sup>o</sup>

By summer 1993, Lambroza hopes to have a set of six modules available for both the @rst semester and second semester Western Legacy courses. In the @rst semester, students will have the opportunity to work on modules that show the rise and fall of the Roman Empire, the travels of Marco Polo, and the spread of Islam from Spain to India. In the second semester, students will learn about the colonization of the Americas and the geo-political aspects of the Cold War.

<sup>a</sup>In developing future modules, says Lambroza, <sup>a</sup>we intend to fully utilize the capabilities of NeXT's state-of-the-art multimedia workstations for audio and video segments, animated graphics, and photos of artifacts and works of art. The modules would be very dif@cult to create in such an advanced form if it wasn't for NeXT's object-oriented programming capabilities.<sup>o</sup>

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