



Real-time interactive geoscience teleducation between the United States and Southern Africa

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International education is a natural extension of global economies, global environmental concerns, and global science. While faculty and student exchanges between geographic areas permit for educational experiences and cultural exchanges for the privileged few, distance learning offers opportunities for educational exchanges under any circumstance where time, expense, or location otherwise inhibit offering or taking a particular course of study. However, there are severe pedagogical limitations to traditional Web-based courses that suffer from a lack of personalized, spontaneous, exchange between instructor and student. The technology to establish a real time, interactive teleducation program exists, but to our knowledge is relatively untested in a science classroom situation, especially internationally over great distances. In a pilot project to evaluate this type of linkage, we offered a real-time, interactive class at three separate universities, which communicated instantaneously across an ocean at a distance of greater than 8,000 miles and seven time zones. The course, "Seminar on the Ecology of African Savannas", consisted of a series of 11 lectures originating in either Mozambique (at the University of Eduardo Mondlane), South Africa (University of the Witwatersrand) or the United States (University of Virginia). We combined ISDN, internet and satellite linkages to facilitate the lectures and real time discussions between instructors and approximately 200 university students in the three countries. Although numerous technical, logistical, and pedagogical issues—both expected and unexpected—arose throughout the pilot year, the project can be viewed as overwhelm-

ingly successful and certainly serves as proof-of-concept for future initiatives, both internationally and locally. This review of our experience will help to prepare other students, faculty, and institutions interested in establishing or developing international education initiatives.