

ELECTRONIC FIELD TRIPS: USING TECHNOLOGY TO ENHANCE CLASSROOM INSTRUCTION

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ELECTRONIC FIELD TRIPS: CREATING LEARNING OPPORTUNITIES FOR RURAL STUDENTS

Rural schools are located in every state, and almost every county, throughout the United States and represent a very diverse population with a variety of needs and concerns. Because of the very nature of rural schools and rural issues which are associated with isolation, health concerns, poverty, and high educational costs, many rural schools and students are confronted with a multitude of societal and educational problems. The report, *The Condition of Education in Rural Schools* (1994), paints a sometimes bleak picture of rural education.

The effective use of technology is one way to overcome some rural problems. Vaughan, Boethel, Hoover, Lawson, and Tones (1989) indicated that technology can overcome the problems of rural isolation as well as issues associated with several financial limitations and the need for specialized courses for few students. Beckner and Barker (1994) supported this belief that technology is of great importance to rural schools.

The Center for the Study of Small/Rural Schools at the University of Oklahoma, in response to rural isolation concerns identified in the literature, sought and received partial funding from the Southwestern Bell Foundation to work with selected rural school districts who were members of the Organization of Rural Oklahoma Schools (OROS). The grant was utilized to facilitate the creation of collaborative networks of rural schools which would participate in a series of electronic "field trips" for rural school students. The "field trips" were actually conference telephone calls which allowed students and teachers in the several rural networks to talk with experts in areas such as politics, the arts, the sciences, and the world of work. Selected experts shared their knowledge, provided guidance, and answered questions.

Since the grant was for the 1993-94 school year and was not received until late in the fall of 1993, it was necessary to hold informational and training sessions during the fall and conduct the actual "field trips" in the spring of 1994. All school districts who were members of the Organization of Rural Oklahoma Schools (OROS) were invited to attend a one-day training and planning session. The Organization of Rural Oklahoma Schools represents approximately 300 rural school districts in the state. Six rural networks were established at this initial meeting from those in attendance. A total of thirty-three schools agreed to participate in the project.

The one-day training session additionally focused on how to utilize the electronic "field trips" to expand and enhance classroom instruction as well as how to prepare students for the "field trips". Attendees also learned how to process with students after the "field trip" and how to evaluate the experience in light of district and state identified educational goals. A list of potential speakers was generated and plans were made for initiating the implementation stage of the project.

The implementation stage for the electronic "field trips" began in the spring of 1994. Students at each of the six networks participated in at least four "field trips." Some of the "field trips" were designed for elementary students while others were designed for secondary students. A few "field trips" represented a mix of both elementary and secondary students. Perhaps the most difficult aspect of the project was providing adequate speakers for each electronic "field trip". Some speakers cancelled or rescheduled at the last minute because of other concerns, but all were willing to participate once they committed to do so. But given this one issue, the "field trips" were successful and provided students a glimpse of a world beyond that of their rural community. "Field trip" presenters included then Governor of the State of Oklahoma, David Walters, as well as other noted politicians such as the Speaker of the House, the Chairman of the Corporation Commission, the Superintendent of Public Instruction, and the Lieutenant Governor. But, not all of the speakers were politicians. Other presenters included an astronaut, a Native-American artist, an author of children's books, a warden of a state prison, and a television sportscaster. Foreign viewpoints were well represented when speakers from embassies such as Great Britain, Spain, Norway, Israel, and Switzerland participated in the "field trips". Many of the "field trip" speakers agreed to participate in more than one meeting. All were enthusiastic and supportive of the students and agreed that the "field trips" were valuable.

Governor Walters indicated that the "field trip" had renewed his spirit and was a wonderful experience.

A total of 18 presenters agreed to discuss their careers and expertise with the students. Although all "field trips" were worthwhile, the students especially enjoyed discussing the space shuttle with Astronaut Shannon Lucid and in learning about foreign cultures from those representing the previously identified embassies. Each session utilized a short presentation by the speaker then questions were rotated between each school in the network.

Costs to each school district were minimal. Districts were asked to pay for their portion of the conference call and where necessary supply a speaker phone for the students. As an average, each "field trip" lasted one hour and cost \$15-\$20. All of the schools indicated that this was very reasonable. The total cost to each district for four "field trips" was approximately \$100 for long distance charges plus the cost of a speaker phone.

After the "field trips" were over, students, teachers, and administrators were randomly contacted to determine their evaluation of the project. In addition, a formal evaluation instrument was mailed to each school district. The interviews elicited the following types of comments:

Administrator: The field trip was very educational. It was an excellent learning opportunity for our students. The teachers were able to use the information to supplement the existing curriculum.

Administrator: *Our experience was very positive and I felt the participating students were able to learn a great deal from their interactions with the political officials and dignitaries. . . I hope that we will be able to participate in a similar endeavor in the future.*

Teacher: *The field trips were great! We taped them and put the tapes in our library for all the students to use.*

Teacher: *The field trips were a worthwhile project. My students were able to expand their knowledge base. They were very impressed with the speakers.*

Student: *We were able to visit with people we see on television and it gave me a better understanding of our state government.*

Student: *The field trips were exciting. It was wonderful to speak to people like Dr. Shannon Lucid and Kelly Haney.*

The formal evaluation instrument was mailed to all participating school districts. In spite of the lateness in the school year (May), 81% (N=27) were returned. The evaluation instrument utilized a Likert type scale with one being the lowest and five the highest. The table below provides the results of the study. Most interesting is that the vast majority indicated the "field trips" expanded students' knowledge, that listening and speaking skills were improved, and that the speakers represented valuable role models for the students. As can be seen from the table, the "field trips" were not as useful in helping students improve their writing skills or increase their understanding of a global interdependence. Also, the "field trips" were not utilized as fully as possible in expanding the existing curriculum. Rather, it seems that for a few districts the "field trips" were viewed as activities and not as a curricular component. In the future, teachers will be assisted in integrating the "field trips: more fully into the curriculum.

The evaluation instrument also provided an opportunity for written responses. One hundred percent of the respondees indicated they would like to see the electronic "field trips" continue. Some of the written comments were very interesting because the schools provided information relating to how the "field trips" were further utilized in their separate school districts. Some students made presentations to other students regarding the "field trips;" some wrote newspaper articles about their "field trips;" and some students spoke to community groups regarding their "field trips."

TABLE 1: EVALUATION OF ELECTRONIC FIELD TRIPS

Respondents N=27, 81.82%

	LOW 1	2	3	4	HIGH 5
1. The trips helped expand students' knowledge of a variety of subjects.			11.11%	55.56%	33.33%

			N=3	N=15	N=9
2. The trips helped to expand writing opportunities.	7.41%	11.11%	29.63%	44.44%	7.41%
	N=2	N=3	N=8	N=12	N=2
3. Listening skills were improved.			11.11%	48.15%	40.74%
			N=3	N=13	N=11
4. Speaking skills were improved.			22.22%	59.26%	18.52%
			N=6	N=16	N=5
5. Interviewing skills were enhanced.			14.81%	48.15%	37.04%
			N=4	N=13	N=10
6. Research opportunities were made possible.			29.63%	51.85%	18.52%
			N=8	N=14	N=5
7. Student awareness of global interdependence was increased.	3.70%	11.11%	22.22%	40.74%	22.22%
	N=1	N=3	N=6	N=11	N=6
8. The speakers of this project provided role models for a diverse student population.			14.82%	33.33%	51.85%
			N=4	N=9	N=14
9. The field trips were used to expand existing curriculum.	3.70%	11.11%	25.93%	33.33%	25.93%
	N=1	N=3	N=7	N=9	N=7
10. Students developed a better understanding of government.		3.70%	14.82%	48.15%	33.33%
		N=1	N=4	N=13	N=9

The electronic "field trips" coordinated and provided by the Center for the Study of Small/Rural Schools at the University of Oklahoma were successful because they broadened the world of rural students and directly addressed the issue of academic and personal isolation. They were cost effective for rural school districts and provided students an opportunity to share their knowledge and inquiries with others. Although this project did not represent a true "high tech" approach, it did show what could be done to provide rural students an opportunity to expand their horizons. The cost was nominal for all schools involved. The process can easily be replicated by single rural districts or by networks of rural districts. It simply takes coordination of speakers and the commitment to broadening the knowledge base of rural students.

In the project described above, both presenters and students enjoyed the "field trips" and found the experience a rewarding one. The students will remember the "field trips"

and truly learned from them. After all, isn't that what education is designed to accomplish?

References

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