A Promising Teacher Training Model for Rural Settings.

A training model to prepare practicing teachers in rural areas as special educators is described. Developed at Kansas State University, the model employs a multi-modal approach which combines a variety of long-distance teaching methods with traditional on-campus summer course work. The model incorporates the use of an interactive audio telecommunications network, independent study, and field experiences that allow students to apply their newly learned skills in the settings where they work. Each training cycle is conducted over a spring-summer-fall time span. During the spring semester, participants attend an on-campus conference, read selected materials, and participate in several teleconferences. The content of the teleconferences ranges from discussion of reading assignments to guest speaker presentations or a networking of experts from locations anywhere in the country. Summer activities include traditional courses on campus and simulated lab experiences. During the fall semester, teachers apply new skills in the school districts where they are employed, with the assistance of a local collaborator who provides advice and feedback. Teleconferences link students with university resources for problem-solving. A final drive-in conference is held near the end of the semester. Evaluation methods include student self-assessment on a continuing basis through keeping logbooks. (Author/JW)
A Promising Teacher Training Model for Rural Settings

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Paper presented at the Council for Exceptional Children's Topical Conference on the Future of Special Education
Orlando, Florida, Nov. 15-17, 1987
Abstract

One solution to recruiting special education teachers for rural areas is to identify practicing teachers in rural areas who are willing to get the needed special preparation. This solution requires long distance teaching approaches in order to allow the students to remain employed in their rural communities while getting the training.

The training model developed at Kansas State University utilizes a multi-modal approach. Each training cycle includes a spring-summer-fall time span. During the spring semester, participants attend a drive-in conference on campus. Following this introduction, the students receive selected materials provided by faculty and participate in two or three tele-conferences using the interactive telecommunications system (TELENET). The summer activities involve traditional course work on campus as well as simulated lab experiences. The final experiences occur during the fall semester when students apply the new skills in the school districts where they are employed with the assistance of a local collaborator who provides advice and feedback. Again, two or three teleconferences are held to link the student with the resources of the university. A final drive-in conference is held on a Saturday near the end of the semester.

This model is effective for teacher training programs in rural areas although it is not superior to traditional face-to-face instruction. Given the problems of serving teachers in rural areas, the model holds promise for the future of special education.
A Promising Teacher Training Model for Rural Settings

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Recruitment and retention of special education teachers is a major problem in rural America (Helge, 1984). One solution to the recruitment problem is to identify practicing teachers in rural areas who understand the unique needs of rural settings and who are willing to get the needed special education preparation. This seemingly simple solution becomes complex because of the difficulties of providing instruction to these individuals without requiring them to leave their homes to spend extended time on campus. Many of these individuals are married and have family responsibilities that prohibit them from leaving home. The teachers could take courses on a part-time basis but the distance from the university is often too great to be practical.

Long distance teaching is one alternative to meeting the needs of individuals in rural areas. Long distance teaching is often done through off-campus instruction where instructors drive local sites to teach courses. Other options include correspondence courses, video-taped presentations or educational television. All of these options have limitations such as long travel distances for instructors, limited interaction among students and instructors, high drop-out-rates or limited access to university resources. These and other factors have encouraged us to develop and validate a training sequence that circumvents some of these problems. A review of the literature of long distance teaching provided a framework
for developing the model described in this paper.

**Literature Review**

Long distance teaching options are not new to higher education. However, the use of educational technology in long distance instruction is a fairly recent and promising development. Educational technology includes any educational technique that involves interactions between students and electronic media which allows access to instruction generated in a different location. Examples of educational technology are broadcast television, cable television, computers, electronic blackboards, fiber optic or microwave transmission, slow-scan television, audio teleconferencing, video-teleconferencing, videotapes, and satellite transmission (Barker, 1987; Forsythe & Collins, 1983; Yeoeell, 1980a). These technologies have been used individually and combined to deliver interactive i.e., audio or video feedback between the students and the professor, courses to rural areas.

The largest and fastest growing interactive system is the TI-IN Network in Texas (Barker, 1981). It utilizes satellite transmission and offers over 100 hours per week of live interactive programming, including high school courses, inservice training and staff development, selected college credit courses, student remediation courses, text reviews for teachers and students, and community programs. The subscribers to TI-IN are mainly rural and small schools.

Large interactive long distance programs in Oklahoma, Florida, British Columbia, and Utah are also cited in the literature (Florence, 1987; Florida State Post-Secondary
Education Planning Commission, 1985; Yeoell, 1980a). Providing educational services to people who might otherwise have no access to postsecondary education or special courses is the primary benefit reported. Various programs have provided information about the advantages of telecommunication compared to more traditional methods of long-distance instruction. The interaction among students and between students and the teacher is a positive outcome mentioned by all these programs. The British Columbia system (Yeoell, 1980a; 1980b) reported that the distance education product was better planned, prepared, organized, structured and presented than the average lesson delivered in a regular class. As a result, the outcomes of the courses as compared to regular classes were superior. The multimedia approach used in many of the courses was varied and stimulating compared to the traditional "chalk and talk" in the traditional classrooms. Students felt they learned the material and faculty felt challenged by the courses.

Telecommunications classes are not without their problems, however. Most students said classes were harder than regular classes and the majority said they would rather take classes in the regular classroom if they had the choice. Contact between the teacher and classmates at other sites seemed too impersonal and many programs cited technical problems and expenses to be their greatest difficulty. Another problem reported by students was that regular credit courses were generally not attractive when offered in isolation from complete programs.

Professors cited problems with the interactive
telecommunications system of delivery to be the tremendous amounts of their time and energy that were necessary in preparing materials; little opportunity to organize students into discussion groups and to do practical or problem-solving work; the difficulties in adjusting instruction immediately in response to spontaneous comments from students; pacing the instruction according to the ability of the class and; adjusting the instruction according to the results of tests and homework assignments.

The following recommendations based on the literature review and our own experiences with long distance teaching have been incorporated into the model at Kansas State University:

1. Offerings through telecommunications systems should be part of a total program which provides specific training for students.

2. There should be a strong attempt to individualize coursework and provide for individual differences in experience, interests, and abilities.

3. Professors should provide a mechanism to promote personal interactions and live communications such as visiting local sites, and providing opportunities for students to talk with one another and discuss the reading materials and other instructional activities.

4. The telecommunications medium should be integrated with other more traditional means of course delivery.

The KSU Model

The training model developed at Kansas State University utilizes a multi-modal approach combining the several forms of
long distance teaching along with traditional on-campus summer course work (Dyck & Thurston, 1986; Thurston & Dettmer, 1987). The model incorporates the use of an interactive audio telecommunications network (TELENET), independent study, and field experiences that allow students to apply their newly learned skills in the settings where they work while getting support from the university staff.

Each training cycle includes a spring-summer-fall time span as summarized in figure 1. During the spring semester, participants attend a drive-in conference on campus where they are introduced to program philosophy, are given an overview of the skills to be developed, engage in networking activities and complete pre-test materials. This first session is designed to be motivational for the participants. In addition, selected reading materials for independent study during the remainder of the semester are given to each participant.

Insert Figure 1 about here

Two or three tele-conferences are held during the spring semester. These conferences utilize a state-wide telecommunications network (TELENET) established by the Kansas Board of Regents. TELENET utilizes an interactive audio system. During the conferences, the project staff members are located at a site on campus where the necessary equipment is available. Project participants go to other sites near their homes where comparable equipment is located. There are nearly 40 such sites located throughout the state so no student has to
drive more than a few miles to reach a site. In isolated cases students can access the system by their home telephones.

The content of these tele-conferences varies. One or two of the independent reading assignments are usually discussed and often either a project staff member or a guest speaker makes a presentation on a selected topic that supplements the independent reading assignment. One of the nice features of the TELENET arrangement is that experts on various topics can be connected to the network from their home or office telephones. This technique allows utilization of people with expertise from across the country and greatly enriches the experience.

The summer activities for the project involve courses taken on campus. The content of these courses vary according to the needs of the students involved. Many courses are short and intensive, varying from three to six weeks. This short time span allows long distance students to live on or near campus for a minimal length of time. Simulated lab experiences are a valuable part of this summer work.

The final experiences occur during the fall semester. Each student is required to apply the newly developed skills and processes in the school districts where they are employed. Implementation of these changes is not always easy. One or more local persons are identified to serve as supervisor/collaborators (teams were used in one project). These persons are selected by the students. They are often building administrators. Together the student and collaborator
plan how the objectives of the field experience can be met within the organizational structure of the local situation. The collaborator has been very helpful in assisting in self-assessment work. They have little interaction with project staff but are asked to provide non-evaluative feedback to the staff.

One of the major challenges of the model is to monitor and evaluate student progress during the field experiences. Several approaches are used.

1. Student self-assessment (Bailey, 1981) activities that require students to take baseline data, set means-referenced goals and gather data to measure progress toward goals are encouraged. Participants are required to keep a log that describes and evaluates each type of activity related to project goals. When appropriate, they are required to use video-taped sessions to help them in the self-assessment process.

2. When possible, university faculty go to the local sites to observe students but these observations are less frequent than under normal circumstances. Tele-conferences are once again utilized during the semester. Much of the content of the conferences revolve around problem-solving and dealing with new issues that develop during the implementation phase.

A final drive-in conference is held on a Saturday near the end of the semester. Students have opportunities to share products and experiences, guest speakers present information on specific areas of interest, usually identified during the field
experiences, and final evaluation data are collected.

Results

The model has been used for three years with two different projects. The first project involves training special education teachers to use consulting skills more effectively. The second project is training teachers of learning disabled adolescents to incorporate life survival skills curriculums in their programs. Although the content of each program is significantly different, the basic model described above has been used with both projects.

Does the model work? Are we able to reach into rural areas to train special education teachers? Are they learning anything? Are they doing things they would not have been able to do if they had been enrolled in a traditional program? Are they satisfied with the programs offered? Formal and informal evaluation data suggest the model is effective in the following ways.

1. About 100 practicing teachers in Kansas have participated in training activities utilizing the model. The majority of the teachers lived within 150 miles from the University and about 10 percent resided in areas as much as 300 miles away from the University. The model unquestionably reaches teachers in rural areas.

2. Students were able to carry out a variety of learning activities because of this unique delivery system. During the summers on campus, they designed programs and activities as part of their regular course work. These programs and activities were directly related to the content of the total
program and were developed in response to individual interests and to the need in the settings in which the students were employed. Some examples of activities were:

a. Inservice/staff development activities such as staff open house, buffet lunch, mini-minutes idea exchanges; games, calendars or weekly bulletin boards in teachers lounges; teachers helping teachers workshops; and notes and rewards in teachers' mailboxes.

b. Parent involvement projects such as parent tutoring handbook, parent workshops on study skills, parent support groups, rainy day activities, parent handbooks, parent meetings, parent newsletter, and weekly report cards.

3. For more formal evaluation of student learning and assessment of the impact of the training on the teachers in the programs, video-taped role-play situations and a variety of written assessments and ratings were used. These data indicated students generally felt they met project objectives and that, while they would prefer face-to-face instruction, the long distance aspects of the model were beneficial.

Conclusions

This model is effective for teacher training programs in rural areas although it will require modification if a telecommunications network is not available. It is not better than traditional face-to-face instruction so we do not recommend it for urban settings. However, given the problems of serving teachers in rural areas, we believe the model holds promise for the future of special education because teachers can receive training without quitting their jobs and leaving
home for extended periods of time, it provides a long-term interaction process, it provides support at the local level while students practice implementation of newly learned skills, and it does not rely exclusively on one mode of delivery.
References


Phase I - Spring Semester

1. Entry Drive-in Conference
   (one Saturday on campus)
2. Directed Readings
   (in field, one semester hour credit)
3. Three Teleconferences
   (by TELENET, linking LEA and University resources)
4. Summary Reports
   (Statements of participants' individual needs and goals)
5. Prepare Summer Experiences
   (based on written and verbal statements of needs)

Phase II - Summer

1. Coursework on campus
   a. "The Consulting Process in Special Education"
   b. "Parent Involvement in Special Education"
      or "Issues in Special Education at the Elementary Level"
2. Interpersonal Communications
   (informal gatherings and group discussions with faculty)
3. Simulated Lab Experiences
   (Video tapes, role play, interviews, discussions)

Phase III - Fall Semester

1. Field Practice
   (application in real settings, two semester hours credit)
2. Local Supervision
   (application supervised by representatives endorsed by local Directors of Special Education)
3. Three Teleconferences
   (by TELENET, linking LEA and university resources)
4. Exit Drive-in Conference
   (Final summative experience and evaluation)