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ABSTRACT

The College of Education at the University of Northern Iowa (UNI) created collaborative partnerships with nine major school districts in Iowa in order to establish several kinds of relationships between practitioners and university faculty which computer networks facilitated. A new "Cobra" computer conference system was expanded to the nine regional off-campus centers where UNI student teachers were working, and modem-equipped portable computers were linked to the campus through a WATTS telephone line. Personnel, including field-based personnel and practitioners, were then able to communicate with nearly all offices on UNI campus through E-mail and computer conferences. Further programs have recruited teachers as center Cadre members. The ability to connect campus faculty to field practitioners has positively affected the teacher education program at UNI. Classroom teachers have been a valuable resource for teacher trainees and student teachers; they have influenced university committee decisions, impacted curriculum content and methods classes, and enhanced rapport between faculty and teachers. When faculty and teachers talked about a mutual interest, traditional barriers tended to disappear. Student teachers have benefited through more frequent communication, and their cooperating teachers' interest in Cobra was heightened. Lessons proposed for similar programs are: (1) keep technical information simple; (2) establish leadership and commitment; and (3) find ways to introduce computer network users face-to-face to build rapport. Contains 8 references. (JB)

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Using Computer Conferencing Technology  
To Assist Collaboration Between Higher Education  
Faculty, Student Teachers and K-12 Practitioners

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## Using Computer Conferencing Technology To Assist Collaboration Between Higher Education Faculty, Student Teachers and K-12 Practitioners

University faculty in colleges of education typically seek out practitioners and enter classrooms only when they wish to find placements for pre-service education majors needing exposures to children and teaching environments. Outside of student teaching experiences, communications between professors and classroom teachers is minimal. These interactions are "marriages of convenience" (Smith and Auger, 1986).

The educational landscape in public schools is constantly changing. Requirements for teachers have shifted and the science on effective teaching practices has expanded. Therefore, old teacher training paradigms must be broken. Teacher Education alternatives must be encouraged, planned and risks must be taken by universities and public schools if modern effective teacher training models are to be developed. Constructing a communication system that links practitioners and university faculty is one mechanism that may assist the change process. Contractual agreements that unite these parties can work if effective communications are established and if both parties realize benefits (Goodlad, 1987).

This paper will explain how the College of Education (COE) at the University of Northern Iowa (UNI) created collaborative partnerships with nine major school districts across the state of Iowa. Goals of these partnerships were to establish several different kinds of relationships between practitioners and university faculty. Multiple relationships were built, but our remarks in this manuscript will focus on the computer network enacted and the conclusions that were significant.

### The Challenge

In the fall of 1988 the new Dean in the COE at UNI challenged the faculty of the Office of Student Field Experiences (OSFE) to establish collaborative partnership agreements with school districts where UNI student teachers were placed. Nine regional centers were identified. The Dean's vision was to create projects that would cause practitioners to become active partners in the UNI Teacher Education program. He wanted some umbrella activities that all centers could put into practice, but he was also open to project ideas that were center specific. This aspect encouraged UNI faculty to

be creative and innovative and it better allowed K-12 practitioners to contribute project ideas that would benefit their local schools.

### Projects

A computer conference system called Cobra was functioning in the university community. It was new, but growing. The first umbrella project was to expand Cobra to the off-campus centers. To implement the project modem equipped portable computers were linked to the main frame computer on campus through a watts telephone line. Professors who were Resident Coordinators of the off-campus centers, were trained to use Cobra. They were then charged with the responsibility to inform and train personnel in their respective centers. For the first time, all centers in Iowa could participate in computer conferences as well as send and receive private messages through E-mail. Personnel in centers 250 miles from campus and as far as 400 miles apart could communicate with most offices on campus and with each other. No longer was "phone tag" a game Coordinators, practitioners and student teachers were playing. (See Figure 1)

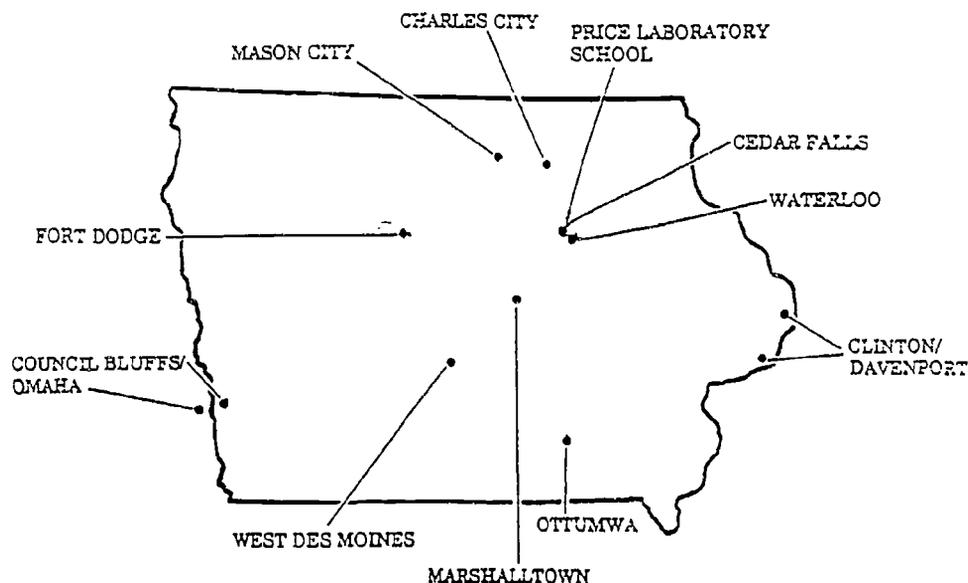


Figure 1

A new dimension was added to Cobra. Field based personnel were sending messages, asking questions and adding responses to conference discussions. Practitioners and professors on campus were having frequent dialogue. The practitioners valued the collaborative interaction, and they were in positions to do something with the ideas exchanged.

To expand K-12 practitioner participation in center operations during 1988-1990 each Coordinator assembled a Cadre of teachers and employed a Clinical Supervisor(s) to work part-time with the Coordinator. Cadre memberships varied from 5 to 27 members and Clinical Supervisors ranged from 0 to 3 professionals. Approximately \$17,000 was needed per center to achieve this second project. A sum of \$2500 was allocated to each Coordinator to support and foster Cadre activities and \$14,500 was used to purchase a percentage of a Clinical Supervisor's contract. In the centers these monies purchased between 30% and 50% of the Clinical Supervisors contract. COE salary savings, an Iowa Department of Education grant for \$108,000 and soft monies from the UNI President's office created the monies needed for this project. This new organizational pattern has best been rationalized by Charles Handy when he explained his "Upside-Down Thinking" philosophy. To be a more effective organization, Handy suggests you reduce the professional core (Professors) and increase the subcontractors (Clinical Supervisors) and independent contractors (Cadre members). Handy's point was that some jobs are short-term so you hire part-time personnel to work until the job is complete. You do not employ more core personnel for these positions.

Throughout the 1990-1991 academic year a third project unfolded. Coordinators, Cadre members and Clinical supervisors collaborated on center-specific projects. They created newsletters, established mentor programs for student teachers, organized seminars and local educational programs and they became familiar with Cobra and the Teacher Education program at UNI. Off-campus center progress was reported by the Coordinator and Clinical Supervisor through various conferences on Cobra. Cobra network users on and off-campus were aware of all center-specific projects. Ideas initiated in one center soon spread to other centers.

In the Spring of 1991 a Cadre Conference was held on campus. Campus faculty and off-campus cadre members had personal interactions. Alliances formed that resulted in joint efforts, e.g. subject matter practitioners advised method's faculty, professors came to Cadre member's classrooms to see first-hand what student teachers were experiencing and research projects were initiated.

It was apparent more collaboration was needed and desired. During the 1992-1993 academic year a fourth project's goal was to obtain modem equipped computers for all Cadre members. Today there are 125 computers off-campus. A grant from IBM facilitated this process. Practitioners are currently involved in 91 different conferences on the Cobra network. Some conferences have

public access, some are special interest groups and some are restricted. Practitioners use the network to serve on University committees, to help plan conferences in specific subject areas, to exchange ideas on effective teaching practices and to participate in research activities. Practitioners have presented papers with UNI faculty at Association of Teacher Educators, Association of Supervision and Curriculum Development and at other national conferences. Because Cobra is linked to Internet many explorations by individuals have been encouraged so the actual extended use of Cobra can not be accurately measured.

During the Fall of 1994 Student teachers in several centers implemented technology projects to fulfill their Action Research requirement. Projects included: 1. Journal exchanges between student teachers assigned in different student teaching centers. 2. Global "keypals" between Libertyville, IA and Okinawa, Japan. 3. Virtual fieldtrips between rural and urban classrooms. 4. Electronic mentoring in mathematics. 5. Impersonations done by "in Character" communications after a common reading. 6. Informational exchanges about the same topic. 7. The incorporation of CD-Rom, Laser disks and LCD screens were often tried at the secondary level.

#### Future Projects

The current networking system has brought practitioners, faculty, student teachers and administrators into daily interactions that would not be possible through traditional lines of communications. The "culture" of the UNI conference network is still evolving. The ability to conference has brought the Dean's original vision from being intangible to being noticeable and useable. Higher education faculty and practitioner's interactions are limitless because of the Internet.

Joining the Iowa Communications Network (ICN), the state's fiber optics transmission system, is a desirable extension for the collaborative partnerships. The interactive nature of fiber optics will allow teachers to conduct classes and then dialogue about teaching techniques with students in method's classes on campus. Bridging the gap between theory and practice would be a real benefit to Teacher Education at UNI (Yates, 1993). In-service programs, graduate classes and innovative creations by off-campus teachers are feasible through this medium. The possibilities are excellent because there are 103 transmission sites, plus a portable unit operated by UNI.

Active network participants develop routines unique to

their own needs. Most users want and need a hard copy of conference dialogues so they can ponder issues before they respond. To facilitate this need a grant committee has been appointed to find ways for UNI to purchase printers for each computer we have in the off-campus locations. Students pay \$40 per semester as a computer fee. An argument for using some of these monies off-campus has been formulated and is now being piloted.

Holding In-service programs for practitioners on the uses of Internet's Gopher, Wide World Web and on some of the commercial networks' services must be implemented to further expand the UNI collaborative partnership program.

### Conclusions

The ability to connect campus faculty to field practitioners has positively effected the Teacher Education program at UNI. Classroom teachers have been a valuable resource to teacher trainees and student teachers, they have influenced university committee decisions, they have impacted curriculum content in method's classes and the rapport between faculty and teachers has been elevated (Stahlhut, Hawkes, Frudden, Davis, 1990).

We have observed that when faculty and classroom teachers talk about a specific topic in which they both have interest, e.g. mentoring student teachers; teacher trainee curriculum and collaborative action research, the traditional barriers between them disappear. Canning and Swift (1992) agree that "Once each member develops a self-concept of having a niche in the enterprise that is his/her own and that is valued, discussions engender full participation and take on a democratic tone" (p. 27).

Student teachers probably realized the most benefit from this network. When you student teach the norm is to ask for all the help you can get. Student teachers frequently communicated with network users in and outside of the center where they were assigned. They asked for ideas on discipline techniques, resource materials for units and about action research projects. Student teachers came to the centers with network knowledge and experience. They believed it was a natural extension for them to continue using the network during their clinical field experience. Because student teachers were familiar with Cobra their cooperating teacher's interest in the network increased. Plus, their technology projects have greatly enriched children's experiences in public school classrooms.

Written communications can be misinterpreted. Network

users tended to paraphrase, write brief text, use abbreviations and could not incorporate visuals to add clarity to their comments. Often the tone of an individual's point could not be easily decoded. As users gained experience they found subtle ways to increase understandings of their communications, e.g. \*emphasis\* and :> for a smile. They also learned network etiquette and tolerance, e.g. spelling, grammar and not to respond in haste to a conference entry, because once words were mailed they could only be erased by the conference organizer or Cobra manager.

General conferences designed for public forums were least successful. Without specific tasks, concerns or timelines participants from the field soon stopped making comments. Professors continued to pontificate, often expressing knowledge they believe to be the \*truth\* (:>).

One unsolvable problem has been the unwillingness of schools to provide a dedicated telephone line to the modem equipped computers UNI supplied. As a result, in many situations only the cadre member in each building actually has access to the network. Cadre members have based the computer in their private homes. Until a greater variety of services are available on the network, e.g. entrance into library data bases, printer access or the possibility of pupils in the public school classrooms being given passwords into the network, the administrators will not allocate funds from their budgets to support the network.

Lack of administrative cooperation may have been a blessing in disguise. With the computers at home, cadre members have said they had time to learn the mechanics of the communication system. They reported having them at home has been fun and a professionally enriching experience. Had the computer been at school they would not have had time to "tinker" with them. Cadre members have gained knowledge from being part of the Cobra system. They have verbalized this to their colleagues. Interest for getting the computers into the schools has generally increased among the faculty. Schools that incorporate the leadership plan known as site-based decision making tend to be more interested in getting the computers into the schools than do buildings that are managed by the conventional administrator.

### Summary

There are some definite factors that will contribute to a computer network becoming successful. First, keep technical information simple. Practitioners are alienated by computer jargon. Most teachers are novices

when it comes to using computer conferences. They want technical assistance, so creating a "User's Guide" that explains procedures and commands has to be user friendly. Having a telephone "hot line" consultant available from 4:00 pm - 8:00 pm who can provide help will also reduce user anxieties.

Secondly, there must be leadership and commitment. Someone must facilitate user needs, e.g. getting new users registered with passwords and similar routines, making announcements or establishing a newsletter to update users about available network services, this person must monitor conference interactions, he/she needs to encourage the formation of new conferences and this individual must see to it that equipment is repaired promptly.

Thirdly, finding ways to bring off-campus and on campus professionals together so face-to-face conversations are possible builds rapport. Both parties want to know with whom they are conversing. Having colloquiums that are hosted by the COE Dean and jointly planned by off-campus and on campus personnel lets all the parties know how important and valuable they are to making the network a success.

Computer conferencing will encourage the exchange of knowledge, ideas and opinions. But only if and when users want to implement change will change occur. Computer conferencing will not propagate change, but it can promote it.

#### References

Canning, C., & Swift, K. (1992). Connecting the University and the Field of Practice: Computer Conferencing in Education at The University of Michigan. In M. Waggoner (Eds.), "Empowering Networks Computer Conferencing in Education" (pp. 1-33). New Jersey: Educational Technology Publications.

Edgerton, R. (1993). Upside-Down Thinking. "American Association of Higher Education Bulletin", September, 3-7.

Goodlad, J. (1987). Schools and Universities Can and Must Work Together. "The Principal", September, 9-15.

Harris, B. Judith A Model for Integration of Telecomputing in Precollege Curricula. "Technology in Teacher Education, 637-642.

Smith, D., & Auger, K. (1986). Conflict or Cooperation? Keys to Success in Partnerships in Teacher Education. "Action in Teacher Education", 1-9.

Stahlhut, R., Hawkes, R., Frudden, S., & Davis, T. (1990). Networking Practitioners to Impact Teacher Education. (Eric Document Reproduction Service No. ED 316 500).

Yates, C. (1993). A Revolution by Fiber Optics, Not Firearms. "Northern Iowa Today", Summer, 2-7.

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