

DEVELOPING PROGRAM RELATIONSHIPS WITH RURAL PUBLIC SCHOOLS FOR ELECTRONIC COURSE DELIVERY

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ABSTRACT:

As the benefits of electronic learning extend into the K-12 learning environment, the ability and value of higher education institutions to develop effective relationships with public schools become more important. Distance or electronic learning offers rewarding learning opportunities and electronic delivery solutions to achieve program goals in both higher education and the public school system, especially in rural K-12 settings. This paper and the presentation from which it is derived provides a case study in the development of the relationship between Louisiana Tech University and rural K-12 public schools in northern Louisiana.

The key to developing relationships between rural K-12 public schools and higher education in electronic course delivery is basic collaboration and communication. The ability to articulate issues and program ideas, unique to each educational entity, is critical to successfully networking through obstacles and toward mutual program objectives. However, in working toward program objectives, higher education institutions are no more adept at wading through the multi-layer local issues in public schools than those existing with peer higher-ed institutions. Conversely, rural public schools are unfamiliar with the policies and accountability-oriented programs found in higher education and electronic learning. To integrate electronic delivery into the educational process, both higher education and public schools must embrace change and think "beyond the box". Changing education is in itself "education", but it is a slow process. Changing how people think about the classroom, what they do in the classroom and how they do it...requires changing the traditional mind set of the average educator. Each must learn to think beyond the traditional image of the public school or college classroom, if they expect to expand programming by delivering courses electronically. Public schools must recognize the benefits of collaborating with higher education in offering students and

faculty access to resources available at universities via electronic delivery.

In Louisiana, officials at the highest levels of authority at the Board of Regents stress the value of a "seamless" educational experience for Louisiana citizens. A learning environment where K-16 educators and students share educational goals to not only matriculate in Louisiana, but have opportunities to pursue lifelong learning. The State of Louisiana is developing an educational environment in which higher-ed institutions and K-12 collaborate effectively in sharing resources and developing faculty talents, while improving the quality of public education. It is a mutual effort that benefits post-secondary education by encouraging the learner to stay in Louisiana. With its renewed emphasis on public education, the state expects a return on its investment of resources in electronic learning through improved student retention and graduation rates, as well as overall economic and workforce development. As a result, state citizens become empowered to improve their own quality of life.

Once provided technical resources, secondary and post-secondary systems will recognize the innovative educational and teaching opportunities available outside the traditional classroom. Each level of public education will realize that they share common goals and issues in improving education in Louisiana. By combining resources to meet the new challenges and opportunities in education, electronic delivery can have a positive impact on learning outcomes, whether the learner pursues higher education or vocational technical education. Electronic or e.learning helps educators in secondary and post-secondary to improve teaching skills in the traditional and non-traditional classroom settings, while serving as a valuable professional development tool. Since 1998, Louisiana Tech University has promoted electronic learning by deploying compressed video equipment in more than eighteen public schools throughout rural northern Louisiana. The multi-mode delivery systems, funded by a state grant and the University, were provided at no charge to the school systems. Costs for T-1 line charges were the responsibility of the public schools and frequently qualified for a reduced or e-rate.

Course offerings have ranged from college preparatory, e.g., English and Mathematics, to undergraduate and graduate. Typical courses from the College of Education have concentrated in principalship, school law, classroom management, secondary curriculum and courses relevant to teacher certification. Courses at the doctoral or EdD level have also been offered. A key factor in the deployment of compressed video delivery systems and the offering of courses was the ability to develop a relationship built on trust between Louisiana Tech University and rural school districts. A relationship that addresses administrative, organizational and funding challenges, as well geographical and technical obstacles in order to successfully deliver courses from the University. Before courses sought by school students and teachers could be offered by TECH, several issues in the overall process had to be addressed, including: funding, equipment, telecommunication services, facilities, manpower and training.

Funding the cost of compressed video equipment, line charges and instructional support were critical. A combination of grant monies, with "buy-in" from the public school districts and Louisiana Tech University, made electronic delivery of courses possible.

Equipment costs were provided primarily by a Louisiana Department of Education (DOE) grant program entitled LA. LEARN and Louisiana Tech University. Compressed video line charges through BellSouth were covered initially by LA. LEARN/DOE, but after the grant expired, reverted to school districts. TECH helped one district with line charges for the first year, until they qualified for the E-Rate. Instruction and related support costs were viewed as the "cost of doing business" and borne by the individual entities. However, in some cases the University has paid districts for use of school facilities and for providing onsite class proctors.

After responsibilities are identified and roles begin to be coordinated, the "buy-in" by the University and public schools becomes a "win/win" situation. Each contributes resources and each benefits, as is the case of providing manpower for instructional support. For example, each school district designates a Telecommunication Coordinator (TC) and a Site Coordinator (SC). The TC serves as liaison with TECH for arranging with BellSouth to provide telecommunication services to the various public schools. The school system also identifies a SC at each school as liaison with the University for facilities and support at the individual school. With the designation of liaisons, an essential line of communication and organization is established and deployment of equipment at school sites can begin.

Selection of equipment is based primarily on competitive costs and features. Most of the compressed video equipment being manufactured today is standards-based and able to interact, regardless of brand. The best-known manufacturers are Intel, Picture Tel, PolyCom, VizCam and V-Tel. With the advent of electronic learning, the number of resellers and vendors has increased. As with most technology, the cost of compressed video equipment decreases over time, while the variety of features increase. To simplify training and technical support, it is wise to standardize equipment used among school sites. Technical repairs and support is the responsibility of the school system. While compressed video equipment is usually reliable, it is wise to purchase service contracts to expedite repairs, if funds are available. As with any technology, innovations in equipment and telecommunications are introduced each year.

The establishment of telecommunication services is a reasonably simple process. In the parishes of northern Louisiana, rural schools often seek advice from the University, as a liaison with BellSouth and with equipment vendors. T-1 lines are needed at each public school, as several sites are still not connected to Internet. Also, each school site had a different physical plant infrastructure. A billing account was set up for individual public schools with the State Office of Telecommunications (OTM), which negotiates with BellSouth for telecom services. After T-1 connections were completed by BellSouth and compressed video equipment was installed by vendors, tests were conducted between TECH, the public school site and BellSouth. The successful systems test of electronic delivery equipment and telecommunications technology leads to BellSouth and OTM certification for the public school. Delivery of courses can begin. Once the technology infrastructure is certified, administrative roles must be established. For example, Telecommunication Coordinators assume responsibility for maintaining BellSouth services with the State Office of Telecommunications. Site Coordinators become

responsible for managing classroom facilities and proctors, who provide onsite management between the remote classroom and University. As new roles solidify, it is essential that group communication or idea sharing continue and that "thinking beyond the box" is encouraged throughout the process. A number of administrative issues require the attention of the University and public school systems. Site Agreements executed between TECH and public schools were critical to each understanding individual responsibilities for providing facilities, telecommunication services, training, marketing, as well as meeting enrollment expectations in the courses offered by TECH. Course offerings to rural public schools in northern Louisiana began in the Spring 1999 with eleven teacher workshops held at nine sites. Over four-hundred school administrators and teachers participated. Since Fall 1999, approximately 27 courses have been offered by Louisiana Tech to rural public schools in northern Louisiana. Enrollment in the courses has exceeded seven hundred and fifty. The relationship that developed has been a "win/win" situation for TECH and rural public schools. Developing the relationship between Louisiana Tech University and rural public school systems was built on the basic foundation of mutual communication, commitment, trust and the sharing of resources.

All levels of education in Louisiana are undergoing dynamic change, despite limited resources and taxpayer support, plus an increasing demand for accountability and improved performance. As Louisiana places emphasis on teacher certification, teacher preparation and the infusion of technology at all levels of education, the future looks bright. At Louisiana Tech University, future directions for electronic learning programs are expected to include increased college course offerings to public schools, including not only undergraduate, graduate and doctoral courses, but college prep topics. An increase in the number of public school compressed video sites will depend on support among local educators, as demonstrated through course enrollments. Growth in programs and remote school sites will also be affected by maintaining E-Rate discounts for telecommunications, innovations in delivery technology and continued collaboration between participants. As educators, students and politicians realize the long-term economic benefits and cost efficiency of the partnership in electronic learning between higher education institutions and public school systems, as in northern Louisiana, it is hoped that similar collaborations develop. As has been said, "If you think education is expensive, try ignorance".
