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Collaborating on Web-Based Instruction in Higher Education: Benefits and Risks

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The United States spends $600 billion on education of all types each year, making it the second largest industry after health care. Dunn (2000) estimates that the typical citizen will need the equivalent of 30 semester credits of coursework every 10 years to stay current with coming changes in their fields and lives. Innovative ways of providing such access to education, an absolute imperative in the merging global knowledge society, are required. Distance education provides access through multiple technologies and oftentimes includes some on-site instruction (Dunn, 2000; LaCost, 1998). Networked education (in higher education often referred to as a virtual university) furnishes a web of educational providers that distribute services to the client at the time, place, pace and style desired by the client. In the 1997-98 academic year, postsecondary institutions reported that the most popular delivery technologies were ansynchronous Internet instruction (58%), two-way interactive video (54%), and one-way pre-recorded video (47%). (U.S. Department of Education, 1999). Hundreds of university degrees are now available through distance education; one estimate suggests that 50,000 university-level courses are now available through distance-education delivery systems (Dunn, 2000). The quality of education obtained is determined both by the client (through informed choice) and by a variety of approving and accrediting bodies.

Collaboration is a requirement for future on-line education. Collaboration provides multiple arrangements and flexible alliances among participants. There is now greater availability of grant money for forging collaborations between and among institutions and accrediting bodies For example, the Andrew W. Mellon Foundation is interested in funding collaborative technical projects (Young, 2000), and the U.S. Department of Education has announced $10 million in awards to higher education institutions and nonprofit organizations to assist in providing access to distance-learning opportunities (Confessore, 1999).

The purpose of this paper is two-fold. The first is to describe a current collaboration between an accrediting agency for P-12 schooling and two divisions of the University of Nebraska - Lincoln. The partnership was created to offer web-based learning opportunities and specialized certification to professionals in the field of P-12 education. The second purpose is to explore the costs and benefits associated with such a partnership focusing on the effects on the Department of Educational Administration in Teachers College, one member of the partnership.

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The Partnership

Three units dedicated to offering educational opportunities make up the alliance. The North Central Association Commission on Schools (NCA/COS) is an independent accrediting agency for approximately 8500 P-12 schools within 19 states. Membership in the NCA/COS is voluntary. The Division of Continuing Studies at the University of Nebraska - Lincoln promotes and offers technical support for the provisions of distance education coursework for all departments and colleges on the campus. The Department of Educational Administration, Teachers College, University of Nebraska - Lincoln has eleven faculty members and offers multiple masters degrees and doctorates in both education and philosophy. The programs address administration both in P-12 schooling and in higher education and leadership.

NCA/COS promotes standards for school accreditation that extend the meaning and scope of our traditional view of state standards. The NCA/COS standards, aimed at improved learning for students, differ from the state accreditation standards that have been established as a part of a school improvement process. Specifically, the NCA/COS is interested in providing educators with skills and expertise to improve learning for students; *i.e.*, to lead local school improvement processes, not merely establish them. The organization's interest was piqued by the wave of school reform issues that have inundated educators over the past few years and that are likely to confront educators in the years to come. School districts need qualified persons to lead and monitor their school improvement efforts. NCA/COS sees school administrators and teachers with administrative responsibilities as groups that would use the skills and expertise to implement and maintain reform efforts. But how to encourage the educators to invest in themselves for the aim of improving schools?

The NCA/COS has committed to certifying educators who meet a series of criteria as School Improvement Specialists (SIS). The major component of the criteria includes the completion of a four graduate-level course sequence (12 credit hours). NCA/COS leaders anticipate training 4500 SISs. The question that emerges: How to provide a common core of coursework to educators in 8500 schools in 19 states?

In order to provide commonality to the certification standard, web-based courses are to be offered on-line through an interactive web-site. The three units have joined hands-and dollars-to provide four courses to educators that meet NCA/COS selection criteria and who are involved in education at NCA/COS accredited schools in the 19 states. The coursework requires a two-year commitment from students and their respective schools.

Initiative

Called the NCA School Improvement Specialist Program, the initiative is offered exclusively through the University of Nebraska's Department of Educational Administration with support from the university's Division of Continuing Studies. The collaboration between NCA and the two divisions of UNL covers a six-year period, beginning in 1999 and ending officially in 2005, with a contingency to continue the program if the evaluation supports such an effort. The initiative is divided into two phases, development and delivery. The 1999-2000 academic year was devoted to development. The remaining five years is focused on the delivery of the program and will, by the close of the contract, have involved three cohorts of students. Each cohort will take four courses, one per semester, for four consecutive semesters, with limited access during the summer sessions.

The Students

Qualifications to engage in the program include three or more years of experience in education and, of course, the desire to provide leadership in

the P-12 setting. The first cohort is made up of ten educators that promote and direct the professional development efforts for NCA/COS, members of the steering committee for the project, sub-committee chairs, invited external leaders to schools, teachers, and school administrators. In addition, the NCA/COS staff has asked for an educator to be recommended by each of the 19 state directors. Subsequent cohorts will be formed as individuals complete the application procedure.

The Certificate

The NCA Credential as a School Improvement Specialist will be issued to those who:

- Complete the four-graduate-course sequence,
- Produce a portfolio within the course sequence that meets rubric criteria,
- Provide documentation from three professionals in the student setting of school improvement in the student's context,
- Participate in a meeting with Commission on Schools staff and the NCA/COS state director for networking purposes.

Expectations of the Initiative

The development team from the two UN-L units and NCA/COS met extensively through the 1999-2000 academic year to create the course content and sequence of coursework. The course content is centered on developing, implementing and evaluating a school improvement process for a specific P-12 site. The plan calls for multiple sections of each of the four courses to be offered over the five-year delivery time period with an additional year added to "teach out" the sequence with the stipulation that no new course work be initiated.

A total of 131 sections of course work are planned over the five-year period of time-112 sections during the contract period and an additional 19 sections that must be taught as "teach out" sections after the close of the contract. Each course, after its initial offering, will be available through multiple simultaneous sections of course work planned from 2000-2001 through 2004-2005. Course 1 commenced in the fall of 2000 and will then be offered over the next four years in multiple sections terminating in 2005. Course 2 will commence in the spring of 2001 and 29 sections will then be offered through the spring semester of 2005 with four sections available to "teach out" the sequence for students who are completing the program. Course 3, similarly, will commence in the fall of 2001 with multiple sections offered until the 33 sections have been completed. This strategy requires six "teach out" sections. Finally, Course 4 will commence in the spring of 2002 and will be offered in multiple sessions, culminating with nine "teach out" sessions after the close of the five-year cooperative effort.

The partnership members expect to have 42 enrollees per each teaching section offered resulting in a maximum of 1, 376 students [(42 enrollees * 131 sections) / 4 courses per student]. Allowing for a 10% attrition rate over the two-year period of courses, the projected number of students to complete the four-course sequence is 1,238 (42 enrollees * 131 sections, less 10% of the total, divided by 4 courses per student). These 1, 238 students, at $3500 per student for a four-course menu, would generate for the partnership in excess of $4.3 million over the time period.

Costs Associated with the Program

Waugh and Handler (1998) point out that both technical and curricular support must be provided for distance programs to function effectively. Access, training and support are three essential areas and include costs to both students and university personnel. In this program, there is also a major cost in marketing the program to ensure that participants know of and recognize the relevance of the product offered to the educational environment. NCA/COS will undertake the marketing of the program as well as offering expertise on content associated with the standards for improving the learning of students in accredited schools. The Division of Continuing Studies at UNL is providing all technical and managerial support. The Department of Educational Administration has shouldered the responsibilities associated with content development and instructional strategies.

The total development and delivery costs are forecast to be nearly $2.7 million. The members of the partnership between the North Central Association and two divisions of the University of Nebraska - Lincoln assessed themselves a total of $37,500 of "seed money." In addition to the actual dollars committed to the project, the two entities at UNL have projected a portion of salaries and benefits of personnel and a portion of general management of the departments to the costs of the project. NCA/COS posts no costs in the development phase of the program although they have had personnel involved with the development team.

Costs were partitioned into the two categories of development and delivery. Development costs totaled $ 456,900 and delivery costs are projected to be approximately $2,214,000. Tables 1 and 2 display the costs across a variety of components required to implement the initiative. The data in Table 2 illustrates that the bulk of cost to the Department of Educational Administration in the development phase is related to the purchase of content experts (both faculty and consultants) and in the delivery phase, in the area of course instruction (again, in faculty). There is a two-pronged commitment on the part of the three members of the partnership— cash input and a portion of annually budgeted salaries and general unit costs for services to be provided. The layout of the costs across categories in both tables illustrates that the Division of Continuing Studies assumes the technical and provision costs. The one-time entry of nearly one-quarter of a million dollars attributed to NCA/COS is expected to support marketing and to offset costs associated with putting the program in place.

Revenue Associated with the Program

Each of the three entities of the partnership provided initial program development funds that totaled $37,500. Students are assessed a fee of $875 per course ($3,500 for the four-course sequence) and are guaranteed no increases. This fee includes NCA/COS credential fee, all university fees including tuition, graduate college fees and distance education fees, and the software required to access the web-based programs.

Table 3 provides a summary of the costs, revenues and revenue sharing that is anticipated. The partnership has projected a $4.3 million revenue stream from program fees based on 42 students per section and 131 sections per course offering (32 sections for course 1 and 33 sections for each of the subsequent three courses, including teach out sections after the close of the contract). Cost recovery is projected by the beginning of the 2002-2003 academic year. The partners expect to share the excess

Table 1. Program Development Costs

Components	Dept. of Ed. Admin.	Div. of Cont. Studies	NCA/COS
Coordination	$ 6,255	$ 3,342	$ -0-
Instructional Design and Production	-0-	110,988	-0-
Instructional Materials	3,663	3,850	-0-
Content Experts	283,506	-0-	-0-
Permission Fees	-0-	3,350	-0-
Travel	22,191	19,755	-0-
TOTAL	315,615	141,285	

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Table 2. Program Delivery Costs

Components	Dept. of Ed. Admin.	Div. of Cont. Studies	NCA/COS
Program Coordination	$119,562	$ 19,340	$240,225
Server Maintenance	-0-	131,961	-0-
Tech. Support	-0-	227,425	-0-
Materials Handling	-0-	124,964	-0-
Student Services	-0-	170,406	-0-
Course Instruction: Faculty	$783,253	-0-	-0-
Equipment/Adjuncts	59,100	-0-	-0-
Grad. Assistants	89,264	-0-	-0-
Enrollment Costs	-0-	247,574	-0-
TOTAL	1,051,179	921,670	240,225

Table 3. Summary of Costs, Revenues, and Revenue Sharing

Summary Item	*Details For Each Summary Item*	*Total*
Costs:		$2,669,974
Development $ 456,900	Delivery $2,213,074	
Revenue:		$4,370,500
Development Funds (seed money from the three entities) $ 37,500	Proposed Program Fees ($875/course * 4,952 enrollments in 131 sections [based on 42 students/section less 10% attrition rate]) $4,333,000	
Revenue Sharing:	Revenues less cost recovery for 1999-2005	$1,700,526
	Dept. of Ed. Admin.	$ 566,842
	Div. of Cont. Studies	566,842
	NCA	566,842

revenue generated by this technology initiative. The potential revenue available for sharing after cost recovery is forecast to be approximately $1.7 million, or $566,842 per unit over the life of the contract. Of course, the numbers of students enrolled in sections may vary and that factor certainly impacts the point of cost recovery. In fact, 24 students enrolled per section would fully meet all development and delivery costs over the six-year period with minimal revenue production.

Risks and Benefits Associated with the Initiative

Bromley and Jacobson (1998) suggested that technology initiatives in education should be subjected to four questions.

- Is this initiative technology driven or educationally driven?
- Does the initiative have social vision built into the technological delivery, and, if so, what are they?
- Does the initiative consider the context of use?
- Does the initiative consider disaggregation of the impact?

We want to discuss this initiative in the context of these four areas, with a major emphasis on question four. First, is this initiative technology driven or educationally driven? Bromley and Jacobson suggest considering if the initiative is undertaken as a means to reach a goal or is it undertaken to capitalize on resources available for investment in technology. In this case, the initiative is educationally driven. The three units were not seeking to create an exemplary technological innovation nor was their primary interest that of revenue generation. Specific goals were articulated by NCA/COS in light of the national emphasis on standards. A web-based approach to training 4500 school leaders for a standardized certification is a logical and rational solution.

Second, does the initiative have social visions built into the technological delivery, and, if so, what are they? Pedagogical and organizational issues have been at the center of the discussion of the development team. Bromley and Jacobson ask program developers and implementers to consider if the technological medium being used is compatible with multiple views of the purposes of schooling. The development team-the content experts and the consultants, in particular-has focused content and context above the use of technology for its own purpose.

Third, does the initiative consider the context of use? The use of technology to offer this web-based sequence is centered in schools and on school personnel. The screening procedure, the ultimate end result (certification by NCA/COS), the marketing that will address the benefits to both schools and school personnel and the provision of software, books and materials from one central source are means by which this team has tried to link context to the initiative. Further, the course content is developed in such a way that plans and processes for school improvement will always be site specific.

Fourth, does the initiative consider disaggregation of the impact? Bromley and Jacobson suggest that implementers determine both who, in the long run, will be helped by the offering and what harm may occur because of this offering. We believe that this question is really about the risks and benefits that are produced as a result of this initiative.

For the Division of Continuing Studies, the unit that provides technical and mechanical support for the provision of distance education courses at the university, the benefits are mainly monetary. The unit supports itself through grants and contracts; this venture, if successful, provides an influx of dollars that will assist them in maintaining and improving their services to the university as a whole. A spokesperson for the division stated that the greatest loss would be the development costs, because everything is in place to provide delivery; all that is needed is the minimum number of 18 students.

For NCA/COS, benefits include a more informed administrative force within the organization itself, recognition of teachers who are dedicated to leadership through certification, greater credibility for teacher leaders that may assist them in forging closer linkages between themselves and their teacher-colleagues in P-12 buildings across the nation. Of course, the risk is that, in each of the described benefits, those leaders may not perform well, or may be unable to provide enough impetus to "improve" the school setting, thus impacting linkages and credibility. The ultimate risk is that certification as a school improvement specialist may never result in improved processes in the school. If this should be the case, the initiative is a costly venture-costly in terms of dollars and time on the part of students and school districts, costly in terms of social impact for NCA/COS.

What are the risks and benefits to the Department of Educational Administration? First of all, involvement in the initiative aligns the department with long term college and university goals to increase student enrollment and to generate grants and contracts at the unit site. The initiative, if successful, provides a model for other departments in the college to pursue. The department's enrollment in P-12 coursework will of course be elevated. More important, the department has an opportunity to increase the number of master degree candidates seeking administrative expertise and certification. Though the initiative only offers four courses for NCA/COS certification, it provides the opportunity for the department

to encourage those students to apply for admission and take other coursework offered by the department as a part of a master of education degree. Furthermore, involvement in the initiative, whether ultimately successful or not, provides a multiple year, multiple-subject research stream for faculty members.

Monetary benefits abound, should the program be successful. With a current $50,000 per year budget for operating costs and travel, an influx of dollars for a three-year period of time provides multiple opportunities for departmental development. Furthermore, the department will be able to invest in state of the art technological advances, provide more comprehensive faculty development opportunities, provide graduate student assistance for future research projects, provide greater parity to faculty research endeavors by equalizing resources between both grant-funded research and self-funded research, and show good faith for matching funds for future grant-seeking initiatives.

The monetary risks, should the venture fail, appear great, but the costs associated with various inputs are already built into the departmental budget. Physical resources are re-allocated to this alternative use of personnel and equipment. The worst case scenario is no student enrollment. The original $37,500 seed money would, of course, be lost (however, departmental contributions came from internal grants offered by the university), and the half-million dollar investment in the development phase (through reallocation of already committed resources) might, at first glance, seem ineffectual or futile. But both seed money and development dollars were spent during the first year for travel to brainstorm, to confer, to consult, and to build content and strategies. The faculty involved has gained extensive knowledge about course-building and adapting content for web-base courses. Professional development gains certainly have occurred, and thus offset costs associated with the activities. Of greater concern is the effect of such an investment on the organizational structure of the department. Risks of over-extension and of reallocation of unit dollars from current initiatives to an unknown initiative should be considered. Certainly the impact on organizational morale and departmental climate may be either positive or negative. The devotion to new program development prevents devotion to other initiatives in each of the divisions and shifts, in the case of the Department of Educational Administration, the burden for on-going academic programs and services to the shoulders of the remaining faculty and staff. With its dual doctoral program and multiple masters programs, the services of all faculty members are likely to be spread even more thinly than is the current practice.

Closing

The purpose of this article was to provide an overview of a six-year collaborative venture undertaken by two units within a university and a national accrediting agency and to assess the benefits and risks involved. The members of the alliance, called the NCA School Improvement Specialist Program, are the North Central Association Commission on Schools (NCA/COS); the Division of Continuing Studies at the University of Nebraska-Lincoln; and Department of Educational Administration, Teachers College, University of Nebraska-Lincoln. Development and delivery costs as well as revenue potential were presented. Using a framework developed by Bromley and Jacobson (1998), the risks and benefits of the partnership were assessed. Now in its second year, the path ahead for the initiative has been plotted, the journey has begun; but the outcome is unknown.

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