<u>Lessons Lived: Development and Discovery in Health Education Distance Education Programs</u>

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Abstract:

This article highlights three noteworthy distance education program approaches to the delivery of health education courses. Insights into The University of Alabama Masters in Health Studies, now in its second decade delivering a complete degree program via distance technologies, will be shared as well as Texas A&M University's efforts at both graduate and undergraduate health education distance offerings, and lastly, the evolution of the Health Education and Promotion Network (HEPNetwork), the first profession wide opportunity for health educators to gain educational credit by distance. Each program will be discussed, followed by a thoughtful discourse on the challenges each program faced.

Article:

"The day is coming when the work done by correspondence will be greater in amount than that done in the class-rooms of our academies and colleges"

W. Harper, 1885.

Between the first and second World Wars, the US government granted licenses to 202 schools at various levels to broadcast academic courses by the emerging technology of radio. By the end of the 1920s, 13 colleges and universities offered university credit by radio broadcast; by 1940, perhaps given the rise of a new medium called television, interest in college coursework by radio had all but died (Moore, 1997). Interestingly, this was not the first time that attempts were made by taking a distance education approach to educational course delivery. As early as 1833, correspondence courses by mail were offered in Europe; by 1864, in America, over 10,000 students were enrolled in a program in Boston where they corresponded with teachers via written letters (Hubbard, Rodgers, Ashton, & Bland, 1995). As mediums became more sophisticated, television, satellite, computer, and currently internet based distance programs evolved. While not all distance attempts have met the fate of radio, all distance education efforts, past and present, have provided those who embrace it with valuable lessons, both lived and learned.

The purpose of this article will be to highlight three separate but noteworthy distance education program approaches to the delivery of health education courses. Insights into The University of Alabama Masters in Health Studies, now in its second decade of delivering a complete degree pro-gram via distance technologies will be shared, as well as Texas A&M University's programmatic efforts at both graduate and undergraduate health education distance offerings, and lastly, the evolution of the Health Education and Promotion Network (HEPNetwork), the first profession wide opportunity for health educators to gain educational credit by distance. Each program will be discussed, followed by a thoughtful discourse on the challenges each program faced. Finally, the architects of each of these programs take an active voice to share narrative insights and lessons learned from each experience.

UNIVERSITY OF ALABAMA DISTANCE MASTERS IN HEALTH STUDIES, 1996-PRESENT

Background of the Program

The University of Alabama (UA) Department of Health Science conceptualized and developed the first true distance degree program on that campus in 1996. Until that time, for students in Alabama who did not live close to UA's home in Tuscaloosa, they could travel to remote sites for instruction; this model has existed for many years nationwide. The time had come to develop a true distance model, one where students did not have to travel to a remote site or to campus, ever. The Department of Health Science, located at the time in the UA College of Education, approached the Dean of the college to suggest that such delivery of a quality program was possible. With a "loan" from the Dean as funding, and the use of the UA Center for Public Television, national leaders in the field of health education were invited to campus and videotaped during all day teaching sessions; videotape was the high technology of the day, and full course packets of tapes were bundled together and mailed to student's homes in cardboard boxes. Students watched the tapes, read the accompanying support material, and corresponded with faculty instructors via email and phone. Prior to the taping of sessions, an appropriate looking academic set was built in the studio within which the health educator was taped. Students enrolled in UA's Film and Media Studies program served as camera operators, sound technicians, and video-tape editors. A doctoral student in Health Education over- saw the day to day operations. Marketing of the program consisted of traveling the state of Alabama and neighboring states to explain the program to groups of people, for ex-ample, teachers at local high schools who wanted an advanced degree, and setting up an informational booth at professional state, regional, and national meetings. Use of the World Wide Web for marketing purposes was in its in-fancy and not used at a broad level. A dedicated 800 toll-free line was established and students could call during business hours and speak to a live person to register for classes, ask questions, etc. This service has been constant through-out UA's 10 years of program evolution. Students began enrolling for classes in 1997; within two years enrollment saw a steady increase upward, as evidenced in Table 1.

As technology advanced, changes to course delivery were made; in 2001 courses were available in CD-ROM format, as well as videotape. In 2005, the first class was placed completely online, currently all courses are available in all three formats. In 2008, it is anticipated that the 500ih graduate of this program will receive their diploma. Students in this program have come from 29 US states, Canada and Guam, and many active duty military have completed the program while being stationed all over the world.

Challenges of the UA Program

Looking back, the challenges faced in the UA program were both institutional and technical, and in hindsight, simply a function of the times. In 1995 when the program was conceptualized, there was no centralized office on campus to formally work with. Any distance efforts that were "new" were housed and owned by the department in which they were delivered. In 2004 university policy changed to reflect that all distance programs must now go through a central office. This impacted every facet of the Health Studies pro-gram from student registration to marketing. The second challenge was twofold; as technology became more advanced, migration from video to CD-ROM to WebCT had to be thought out with the next generation of delivery at least anticipated. Secondly, original video footage of lectures became outdated as information, hairstyles, and fashion changed with the times. This necessitated a formative evaluation process as part of each course migration and or development.

THE OFFICE OF HEALTH INFORMATICS AT TEXAS A&M UNIVERSITY, 2003-PRESENT

Background of the Program

The idea of offering distance education courses in health education at Texas A&M University (TAMU) became a reality in spring 2004. The TAMU Division of Health Education, housed within the Department of Health and Kinesiology, realized the need for exploring the new paradigm for distributed learning by developing, offering, and pilot-testing online learning courses for undergraduate students. Guided by the theoretical underpinnings and models of quality indicators of distance education course development and delivery, the team of health educators developed two online distance education courses, Healthy Lifestyles and Medical Terminology, offered in spring 2004. Using a survey of items developed from the list of quality indicators in Figure 1, these courses were assessed for quality by students and instructors. Positive enrollment numbers and feedback from students prompted the development of an additional course, Race, Ethnicity and Health, offered in summer 2004. The decision to provide this course as an online option was driven by a TAMU diversity requirement mandatory for all undergraduate students. Additionally, the Department of Health and Kinesiology needed another mechanism of delivering the course material to students, as the traditional, on-campus version of Race, Ethnicity, and Health could not accommodate the number of students who attempted to enroll each semester. The versatility of distance education technologies to simulate the oncampus experience for students wishing to enroll each semester created a means for hundreds of additional students to become exposed to this medium, in addition to providing a new market of students for the Department of Health and Kinesiology.

Additionally, the use of technology provided the opportunity to bring experts in the areas of health disparities and minority health to the virtual classroom. The students were able to experience not only the expertise of the health education faculty at TAMU, but also other experts from across the country. The combination of lectures from these health educators provided a remarkable virtual classroom experience that these students may not have experienced otherwise.

As the success of student enrollment and positive evaluations continued, the Division of Health Education developed the Office of Health Informatics (OHI), which was funded solely from the distance education revenues produced from the first three courses. The OHI faculty and staff

continued to assess the needs of students at TAMU and the needs of the department and university in order to provide courses to meet those specific needs. In fall 2004, Women's Health was added as a distance course offering for undergraduate students, followed by Human Sexuality in spring 2005. During the 2005 academic school year, the following courses were also added: Consumer Health and Health Programs in the Workplace. The new market pools of students and the cost model adopted by TAMU provided a means for the OHI to continue to bring in faculty and experts from across the country to capture their thoughts in health education, and it allowed the OHI to acquire 13 graduate assistants at the masters and doctoral level to assist in the everyday functioning of the distance education course offerings along with three full-time staff members to oversee all operations. As the numbers continued to grow at the undergraduate level (see Table 2 for enrollment trends), the OHI began to assess the needs of the students, department, and university to provide graduate level courses to students in the masters and doctoral program. This option was explored, as a result of some graduate level courses only being offered during certain semesters, and students finding they could not register for courses in the desired semester. To provide options for the graduate students in health education, the OHI team, along with professionals from across the country, developed the following graduate level courses: Applied Epidemiology, Research Methods, and Health Program Evaluation. To date, these courses are mostly taken by students who cannot fit the on-campus courses into their course schedules.

Challenges of the TAMU Program

As the OHI and distance education courses at TAMU continue to flourish, the road to success did not come without challenges. First, in a traditional learning and teaching environment like TAMU, the introduction of distance education courseware may not be embraced by all as a mechanism for instruction and learning. For example, in a distance education advisory meeting held in the fall 2003, a TAMU administrator with some oversight in distance education stated, "Distance students are those students too lazy to get up for 8 a.m. courses." Such misguided thinking led to a process that involved all stakeholders (faculty, staff, students, administrators) in the planning, implementing, and evaluating processes of developing the distance education courses. This provided faculty with an outlet for expressing concerns and suggestions about the delivery mechanism, quality, and content of courses. Additionally, an open dialogue provided the developers with opportunities to present the research that supports involvement in distance education as an alternative to traditional course delivery. The authors recommend readers review Moore and Anderson's *Handbook of Distance Education* (2003) for such support and evidence.

Second, the ever-changing technologies available to students presented a challenge for developers to continually update courses. The OHI team realized through student evaluations and current literature and research in the field of distance education that the quality of technology does not lie in the use of the most expensive and latest technology available in delivering courseware; it lays in what types of technology best meets the learner's educational objectives. According to Shearer (2003), "in development of distance education courses, there is not one best technology, and it is usually a combination of technologies that produces the best course in terms of meeting the learners' educational objectives" (p. 285). The challenge that is presented here is determining what type of technology, or combinations of technologies, best meets the needs of the students the courses are servicing. The OHI provided students with options of how to access course materials: CD-ROM, web-based java presentations (Power Point with audio)

and video presentations (streamed over the web), and MP3 (audio)/ MP4 (audio & video) files of lectures. This allowed students to pick what type of technology worked best for them.

HEALTH EDUCATION AND PROMOTION NETWORK (HEP NETWORK), 2005-PRESENT

Background of the Network

The Health Education and Promotion Network (HEP Network), offered by the American Association for Health Education (AAHE) and the Foundation for the Advancement of Health Education (FAHE) is an example of a collaborative distance education initiative. The HEP Network works in concert with skilled health educators, distance learning experts, and instructional technologists to design and deliver high quality distance education courses for use by colleges and universities. The primary goal of the HEP Network is to provide distance education solutions for collaborating universities.

The HEP Network was initially conceptualized in 2002 as a mechanism for FAHE and AAHE to collaborate with universities to meet the needs of health education and promotion professionals across the country. The initial idea was to target health professionals needing courses for certification in the area of health education. Due to the success that The University of Alabama (UA) had experienced with their distance education program, AAHE and FARE approached the faculty at UA to begin conceptualizing the idea of a profession-wide network to provide educational opportunities and course credit to interested health education professionals. The ideas and conversations of such a network became reality, with the collaboration of several universities in 2005. Fully functioning, the HEP Network's mission is to offer unique and attractive courses and distance education services that students, faculty, and health education and pro-motion programs may find beneficial to meet their needs.

Process

The HEP Network has been built on using the systematic program design process outlined in this manuscript. Courses have been designed to meet the needs of students, universities, and the health education and promotion profession. A snapshot of some of the factors that were weighed in the design and delivering of HEP network courses are listed below:

The needs of the learner: The students of HEP Network courses need these courses for multiple reasons, such as: to meet State certification standards, to transfer into existing master degree programs, for personal growth, to enhance knowledge and skills, etc. In most cases, the students are time-bound and/or location-bound, and therefore, need a distance education course offered in an asynchronous format. To meet all these needs, the HEP Network has developed courses and related materials that are easily accessible by students with internet access anywhere and anytime.

The needs of participating universities: Varying policies, procedures, and cultures among colleges and universities presented unique challenges for the HEP Network. The HEP Network developmental team has developed several administrative and delivery models to meet university needs. Some examples are: 1) universities pro-vide their own instructor or have an instructor identified by the HEP Network, 2) universities can offer courses in the context of their semester/term system or allow students to complete courses in an asynchronous manner, and 3)

universities can use the courses as free-standing courses or place the course materials in an existing course management system (e.g. Blackboard, WebCT, etc.)

The needs of the profession: Health Education and Promotion is a process-driven profession with a solid interdisciplinary content base drawn from the natural and social sciences. Therefore, HEP Network courses, designed for general populations of students, are process focused and are heavily influenced by the responsibilities and competencies outlined for Certified Health Education Specialists by the National Commission of Health Education Credentialing, Inc.

Challenges of the HEP Network

The HEP Network has already served over 300 students with high quality health education distance education courses. The potential student population for HEP Network courses is extensive. The biggest challenge for the HEP Network is to continue to use sound processes to meet the distance learning needs of both students and universities.

HINDSIGHT IS 20/20: LESSONS LEARNED BY LOOKING BACK

The authors of this paper have had approximately 30 years, combined, experience with designing, implementing, and evaluating distance education courses and programs. In the words of the creators of the aforementioned programs, the following is a dialogue of lessons learned, provided in the active voice of each author.

Dr. James Eddy: "If I had to dispel one key lesson from my and my colleague's collective years in distance education, it is that the problems, needs and interest of all constituents involved in the distance education application must be addressed to maximize success. The *process* of designing, implementing, and evaluating the educational efforts must be at the forefront of the creator's mind, not the technology to be used. The technology is only one small piece of the development process. When technology drives the development process, and not the needs of the students, faculty, academic department, and university, then it becomes what I call, 'technology-mediated instruction,' and the students are left in the dark. I believe the process used should focus on a marketing management approach to program design, implementation and evaluation ... also, it should utilize a *Diffusion of Innovation* mechanism to disseminate successful application."

Dr. Michael A. Perko: "Looking back, this once niche market for us has clearly become institutionalized, not only at UA, but in university systems across the US. A challenge at the beginning of our distance program was responding to students needs in terms of delivery and tech support; now it more often deals with assessment of learning outcomes. Accreditations standards for assessment of traditional class-room learning are well established, but assessment measures for distance learning programs are still evolving. Institutions rely on accreditation of their programs and do not move quickly with educational innovations unless strong support exists at the highest levels and the innovation articulates with the mission of institution. This has led us to use the CHES competency areas are our assessment rubric. While we have formative and impact evaluation data on our students, planning for this year will also include an outcomes evaluation to assess how our graduates are using the degree in their practice setting."

Mr. Brian Gordon: "The UA distance program is ten years old this year. The biggest impact from a day to day operation standpoint has been the lesson that while change is inevitable,

students over their time in the program don't like change. For the first seven years tuition and the registration procedure stayed the same, in the eighth year the program was centralized; tuition went up each semester after that. A new registration procedure was implemented, as well as a new generation of delivery. Our strategy to deal with so much change was to highlight and market the one facet of the program that had not changed in ten years - our toll free number that was always answered by a live person. This human touch resonated with our distance students and provided a calm place in a changing environment."

Dr. J. Don Chaney: "I have seen distance education pro-grams come and go because they are based on the needs of faculty (i.e. faculty see it as an easier alternative to on-cam-pus teaching or way to reduce their on-campus course load). These myths are quickly dispelled with experience. Also, administrative and faculty support are integral to the success of DE program development. In addition, incentives should be utilized to reward faculty and departments for providing distance education course offerings. Incentives for faculty participation could come in many forms, such as: counting as part of the course load; counting towards tenure and promotion; allowing the faculty member to generate summer salary, travel money, equipment money, or GA sup-port for involvement. Finally, to those who are considering establishing or expanding their distance education offerings, let me encourage you to do so. Not only does distance education allow for the exposure of new students and professionals to our profession, I have personally seen DE programs strengthen the on-campus course offerings and re-sources available to students and faculty at Mississippi State University, The University of Alabama, Texas A&M University, and East Carolina University. Distance education is win-win for all stakeholders when done correctly."

Dr. Beth Chaney: "The biggest lesson that I have learned in working in distance education programming is that evaluation and assessment of quality is key. If higher education is moving in the direction of delivering coursework to students via distance education technologies, then we in academia and higher education must be responsible for pro-viding solid evidence of its effectiveness. I have also found that distance education courseware is held to a higher standard of evaluation than most of our on-campus, traditional courses. Here's an example: In the two universities that I have been affiliated with, the on-campus course evaluations consisted of a list of approximately 10-12 Likert scale items on student satisfaction with the course. The research that my colleagues and I have conducted on distance education quality assessment involves multiple levels of complex quality indicators that need to be assessed from all stakeholders. It is imperative for distance education programmers and developers to utilize various data collection methods to con-duct multiple evaluations (i.e. process, impact, and outcome) on quality indicators of the courses, learning outcomes, in-vestment of resources, and the technology used. It is only through these types of rigorous assessment can we make decisions regarding continuing, expanding, or changing the current distance education courses and programs."

CONCLUDING COMMENTS

"Technology' is what we call whatever didn't exist when we were born."

Alan Kay, computer scientist at Xerox and Apple

Health educators live in exciting times. There are those practicing now who remember the height of technology was moving from a mimeograph machine to a Xerox copier; other practitioners

have never known anything but email and podcasts. It cannot be stated enough by the authors of this manuscript that the delivery of health education via distance technologies is timely and manageable in the right environment. Three initiatives; the University of Alabama's Distance Masters Program in Health Studies, the Texas A&M Office of Health Informatics, and the HEP Network provide living history of the potential of distance health education efforts and the lessons lived by those who were fortunate to have been a part of this era.

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TABLES

Table 1. UA Health Studies Distance Graduate Enrollments Fall, 1999-2006

Year	Enrollments in Fall Semesters	
1997	11	
1998	20	
1999	41	
2000	43	
2001	76	
2002	111	
2003	132	
2004	125	
2005	120	
2006	125	

 Table 2. TAMU Enrollment Trends, 2004-2007

Year	Enrollment Figures		
	Spring	Summer	Fall
2004	337	222	791
2005	1,651	274	1,362
2006	1,503	233	1,301
2007	1,589	357	1,548