Distance Learning for Special Populations

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Abstract

Distance education strategies for remotely deployed, highly mobile, or institutionalized populations are reviewed and critiqued. Specifically, asynchronous, offline responses for special military units, Native Americans on remote reservations, prison populations and other geographically, temporally or technologically isolated niche populations are explored.

Introduction

Distance learning extends educational opportunities to geographically, temporally or organizationally challenged populations. Prior to the internet, interactive television, and other forms of wireless electronic access, distance education was traditionally the realm of off-campus education sites and correspondence courses. Today, these low-tech methods of instructional delivery remain a fundamental component of distance education. Specifically, for a number of special populations with limited or no access to the information superhighway, distance learning opportunities remain a significant challenge.

Remotely deployed and special operations personnel represent challenging military populations with needs for asynchronous distance learning opportunities. Likewise, a number of Native Americans living in remote areas on reservations also face difficulties in having access to distance-delivered educational programs. Similarly, other individuals, living or working in remote areas or in migratory or highly mobile professions, also face similar issues.

Prison populations represent another special group with a challenging environment for distance education. Also, other institutionalized or voluntarily isolated populations may have learning needs that they seek to address through restricted means because of self-choice or institutional constraints.

A number of other niche populations exist which also experience highly mobile learning environments and limited or unreliable internet access. For example, student-athletes are increasingly challenged to maintain adequate educational progress because of high travel and extended periods of off-campus competition. Professional athletes, at all levels, represent a similar population with special educational and training needs who often lead asynchronous lives.

These diverse populations represent some of the groups that may benefit from the delivery of asynchronous distance education opportunities through the use of DVD, iPod, iPad or pod-cast based instruction. Specifically, through the use of an electronic form of correspondence course or hybrid online/offline learning experience, special populations will increasingly have access to learning opportunities previously restricted by location, time and situation.

Military

Traditionally, our military communities have been served by off-site and online institutions of higher education. In order to qualify as a Servicemember Opportunity College (SOC), institutions are required to offer a significant commitment to distance learning opportunities. The University of Maryland is the

nation's largest provider of educational courses to the American military. In addition, other institutions such as Norwich, Troy, Webster, Embry-Riddle, Central Texas and other universities are serving military bases within the United States and abroad at both the undergraduate and graduate levels. The U.S. Army has established a consortium of higher educational institutions offering courses in person or online through their goarmy.edu program. Community colleges and both public and private colleges and universities also support higher education at most military institutions throughout the United States.

In today's rapidly changing political and military environments, however, these existing programs do not meet all of the educational needs of our service members. For example, in 2006, the commanding general at Holloman Air Force Base requested that New Mexico State University provide distance education courses via iPods for deploying personnel to Afghanistan, Iraq, Korea and other locations. In conjunction with NMSU-Alamogordo, the local branch campus, a number of courses were developed and made available fo rdeploying personnel.

This pilot project addressed a niche population. All Air Force enlisted personnel must complete a two-year technical degree through the Community College of the Air Force to qualify for promotion (CCAF, 2011). As part of their academic program, the Air Force personnel are required to earn 18 semester credits in a variety of general education areas, which at Holloman Air Force Base was provided by the NMSU-Alamogordo campus. However, the then current policy of multiple three month deployments limited opportunities for meeting the academic requirements for promotion and ultimately reduced the incentive for re-enlistment.This situation created a need for a special population response.

Unlike most military assignments, a combat zone deployment created a number of unique challenges for distance learning. Attempts to employ online internet-based distance education proved only partially successful.Though most of our overseas bases have internet access, it is largely for personal communication with family members. The closer to a combat environment, the less internet access is education friendly. In addition, it is a Department of Defense policy to deny access to the internet to regular personnel in a combat casualty environment because they do not want casualty information to be disseminated prior to official notification. In addition, because of the extreme remoteness of many areas in Afghanistan and Iraq and the highly mobile nature of many of the personnel, non-mission essential access to the internet was limited.

In the case of Holloman Air Force Base deploying personnel, the rotating three-month deployment cycles did not correspond with traditional academic calendars. Therefore, a schedule-flexible, non-internet dependent distance learning project was initiated to address the needs of deployed personnel and the Air Force commitment to force retention.

The pilot project was sponsored by NMSU and NMSU-A and involved the use 80 GB video iPods which were pre-loaded prior to deployment with one or more courses. These iPods were provided by NMSU Extension Service and were on loan to the students. A student accountability plan was implemented but will not be discussed in this paper.

Two sociology courses were initially available: Introduction to Sociology and Social Problems.These courses were part of the general education curriculum of the Community College of the Air Force and routinely offered on base by NMSU-A. Each special course involved approximately 40 hours of video lectures which covered each chapter and included appropriate power points and other supplementary materials.

Deploying personnel were provided with the iPod, a rubberized carrying case, paperback textbook, course syllabus, sample quizzes, a battery charging device and the appropriate cables and ear phones. Both technical and course instructions, along with contact information were enclosed. These items were pre-packaged in a zip-loc plastic bag to protect the contents from dust, dirt and moisture. Since the initial course offerings were in sociology, the bags were labeled "Sociology in a Sack."

Since the Air Force deployments were usually for only three months, the course mid-term and final examination and the completion of a term paper were scheduled to be completed upon return to Holloman Air Force Base. In the initial pilot project, these activities had to be completed within 45 days

of their return to active duty at HAFB. However, in instances of longer deployments, these assignments could be completed either online or at base educational centers. It was the intent of this preliminary project to employ digital textbooks in the future.

Because of the deployment schedules, the courses were set up to be completed within a given semester, if possible. However, it was arranged that individuals deploying late in a semester were able to be awarded Incompletes until they were able to complete their course(s).

It was the goal of this project to eventually be able to provide most of the courses needed to fulfill the general education core curriculum of the CCAF Degree Program. However, further program refinement and review by the USAF has been required. Nevertheless, this initial pilot project did prove successful and encouraged NMSU-A to dramatically increase its efforts in distance education for both the military and residents of New Mexico.

Interestingly, the HAFB pilot project also attracted interest by a number of other niche military units. The introduction of USAF Special Operations Command to Cannon Air Force Base in New Mexico created a need for a unique distance education response. Discussions were initiated about a similar program for enlisted personnel in the Special Operations Command. These individuals live highly mobile, asynchronous lives and because of the uncertainties of time and place, they have limited opportunities for continued educational access and achievement. In addition, because of security concerns, internet access is restricted.

With the end of our direct military involvement in Afghanistan and Iraq, these specific adaptations of distance learning technologies and strategies may change. Nevertheless, the military will likely remain an important environment for innovative distance education strategies for both higher education and training activities. From lap-tops, iPods, iPads, pod-casts and even newer technological innovations, the need for flexible tools and strategies will continue to challenge both higher education and the military.

Remote Populations

In many parts of America and other countries, geography remains a crucial factor in everyday life. Remote locations exist with limited access, both physically and digitally and these locations remain challenges for the delivery of distance education and training. In the southwest and in Alaska, this is of particular significance to Native Americans.

Currently, a number of tribal institutions, such as Dine College, have done an excellent job providing educational access through off-site, interactive television and online instruction. Through their WarriorWeb network, online resources are available at their main campus as well as at a number of off-campus locations (Dine, 2012). However, internet and even electricity may not reach everyone on reservations. Among the Navaho, tribal centers and Clan Houses have extended their educational reach to homes and hogans through down-loaded iPods, iPads and DVDs.

At present, there are almost two million internet articles related to Native American distance education programs and issues. Foundations like Kellogg and others have contributed many millions of dollars in support of increased educational access through technology.

Tribal and state universities are both collaborating and competing to provide access to distance education for Native Americans. Wireless webs are rapidly spreading over remote locations, yet access to these grids remains limited for some and it is this problem of niche populations that has contributed to a structurally conducive environment for the use of offline digital technology, such as iPod/DVD assisted instruction. Small, portable, battery powered devices are ideal for access into the low-tech environments of many remote reservation areas. Because students can take the content of their instruction home in the pocket of their jeans, this type of asynchronous distance learning is both available and attractive. Also, iPods and similar digital tools are emerging as technological status symbols among almost all young people, regardless of their racial, ethnic or cultural communities.

Dr. Michael Thomas (2006) coined the phrase “iPod therefore I learn” with a group of freshman English majors at Nagoya University in Japan. He noted iPods were “deconstructing” the border between education and entertainment. This trend is increasingly evident with the advent of iPods, i-Phones, Smart-Phones, Kindles and other digital technologies.

These on and offline devices have been of particular significance in the area of language education. Within many Native American communities, tribal colleges have been adapting these new technological tools as ways to promote learning and retention of their native languages. Mobile Assisted Language Learning (MALL) efforts have experienced a quantum leap in providing local access to language learning and development with the advent of iPod/iPad, MP3 and DVD technology to even the most remote populations (Chinnery, 2006).

A unique advantage of the highly mobile iPod technology in Native American language learning efforts has been the ability to not only listen, but also to record lessons from community elders and local native speakers. Thus, the previously limited access to language and the cultural stories and related contexts that contribute to the unique learning styles of many tribal communities is being captured and shared throughout a variety of communities and learning environments.

At Arizona State University, the College of Liberal Arts offers a tribal financial manager training series that is available both online and through CDs, i-Tunes, and MP3 based delivery systems that allow cars/trucks to be the power source for providing access to remote populations (ASU, 2011).

Migrant laborers comprise another unique venue for mobile asynchronous distance education. Sonoma State University and numerous community colleges throughout the United States have developed special programs to meet the needs of migrant workers (Vazquez, 2002). Most of these programs have sought to provide educational access and require traditional patterns of attendance. However, some institutions have started distance education programs, but the lack of personal computers and internet access have limited student enrollment. Nevertheless, in America and other nations, including China, Europe and Africa migrant distance education is being addressed through the use of mobile learning devices (Shkodrova and Dochev, 2006).

Other special populations include those in highly mobile work environments. Truckers, fishermen, forest service personnel are some examples of these niche populations that are increasingly taking advantage of both online and offline asynchronous distance training and learning. Liebowitz (2007) has discussed a number of the strategies associated with providing learning resources in mobile organizations. As traditional consumers of correspondence courses, these populations are potential markets for iPod/iPad, DVD and pod-casting pedagogy.

Institutionalized Populations

The United States with 5% of the worlds’ population, houses 25% of the worlds incarcerated population (Lowery, 2007). This rate of imprisonment is 40% more than those in our nearest competitors, the Bahamas, Belarus and Russia and reflects an emphasis on punishment more so than rehabilitation (Kendall, 2010).

With the growth of a punitive national penal philosophy in the late 1980s and early 1990, there was a decline in the availability of rehabilitation programs for inmates, particularly with regard to access to higher education (Bailey, 2002). Prison education programs in many states were either phased out or greatly reduced. With Pell Grants being withdrawn from prisoners in 1994, the funding for prison education was significantly reduced.

Though research consistently supported the conclusion that completion of a higher education degree has been one of the most effective factors in reducing recidivism, prison education programs have not thrived because of political and some technological difficulties. Specifically, maintaining in-prison higher educational facilities is expensive. Distance education delivery systems also create a unique set of difficulties.Obviously, prisoner access to normal internet-based instruction is unacceptable for security

reasons. However, Utah State University has employed a hybrid delivery system which includes interactive television (ITV) links with secured internet links for specific course related activities (Carlson, 2004). Other state, including Arkansas and Texas, also conduct both in-institution and distance education programs.

More recently, correction departments in other states, including New Mexico, have provided distance education programs which have contributed to improved prisoner behavior and lower rates of recidivism. Eastern New Mexico State University-Roswell has been offering bachelor's degrees to prisoners in the state through Web-CT software with security components to prevent inmates from having open access to the internet (Carlson, 2004). These benefits of distance education access in prisons are not limited to the United States. In France, Salane (2008) encountered similar results with regard to the benefits of secured specialized distance education delivery efforts.

The use of asynchronous distance delivery via ITV, DVD or downloaded courses through prison education offices have provided the delivery of inexpensive and secure distance educational resources to a variety of prison populations. As in the case of the USAF discussed previously, the use of DVDs, iPods, iPads or other secure, offline technologies have provided important resources in addressing the educational needs of institutionalized populations.

Athletes

Distance education has long been a component of home school efforts for a variety of groups at the elementary and secondary levels.Correspondence and online instruction are common components of the learning environments for young people who are pursuing careers as actors, skaters, ballet, golf, tennis, gymnastics and other careers that require extensive training from a young age. Because of extensive travel, remote training locations and demanding practice schedules, many aspiring young professionals are taking advantage of offline pre-packaged digital instruction (Thomas, 2006).

College athletes are another niche population for asynchronous distance education. According to NCAA regulations, student athletes cannot be extended any special opportunities that are not available to all students. Distance learning opportunities for student-athletes increasingly have been scrutinized by the NCAA (2010). In the fall of 2010, new requirements for non-traditional education were approved which stressed that distance learning courses must include regular and ongoing student/teacher interaction as a component of the learning experience. This ruling specifically targeted correspondence-type courses, such as those made famous by Brigham Young University in the movie *The Blind Side.* However, distance learning courses which combine offline learning with interaction and feed back by way of online access are not prohibited.

Student athletes face challenges associated with their rigorous practice, travel and competition schedules. In a recent NCAA study, one in five college athletes indicated that their sport participation prevented them from choosing the major they wanted (Wolverton, 2007). In addition, most student athletes enroll in only the minimum number of required credit hours during their competitive seasons.This enrollment pattern is particularly detrimental to normal academic progress, especially for basketball players, whose season stretches through both the Fall and Spring Semesters.

With increased concerns and NCAA investigations into student progress and the quality of some distance education or transfer courses, a number of athletic departments promote enrollment in institutionally-based, quality controlled, asynchronous distance education courses which are available to all students. At New Mexico State University, for example, a number of hybrid distance education courses were offered that employed online, as well as offline asynchronous resources for distance education students. The use of mobile technology was attractive to a number of student athletes.

Mike Jarvis, a former college basketball coach (St. Johns University) has been working with a technology group (V-Brick) which has developed iPod and MP4 educational programs.This program has been adopted by institutions seeking to better accommodate the time and access challenges of students, especially student athletes (V-Brick 2006). Their PROMISE Program, as stated by Jarvis, suggests that "Every college has an obligation to provide its students with the tools to foster an active learning

environment." Likewise, V-Brick notes that their program enables universities to transform their educational support for students in general and student-athletes in particular. Jarvis indicates that the PROMISE Program has increased student-athlete grade point averages, and raised graduation rates to 85%, helping to meet a critical component in maintaining their full NCAA athletic scholarship allotments.Though designed for student athletes, this program has been available to all students at those institutions which have adopted it to meet NCAA requirements.

Professional athletes comprise another niche population for asynchronous distance education.Confronted with the demands of long training/practice periods and extensive travel for competition, many athletes entering the professional ranks have not completed their higher educational goals. The WNBA requires that all players must have completed (not graduated) four years of college or two years of international competition prior to being eligible to compete in the WNBA. The NBA will not draft a player until one year after graduation of their normal high school class. Most NBA players attend college for at least one year and most for two or three years, but most of them have not completed a degree program. The NBA Players Association and the NBA have a joint program of career development and offer players comprehensive services in the areas of education and career development. In the area of continuing education, this office provides academic advising, transcript evaluation, degree planning, graduate school entrance examination preparation and tutoring services (NBA, 2007). Each NBA team has a player development assistant who works with players on their educational objectives. Though some players continue their education during their playing days, most do not because of time and travel demands. A small number of players, including such notables as Shaquille O'Neil, have completed their undergraduate and graduate educations through distance education options while playing in the NBA. Since ear buds and iPods are almost uniformly a constant with most players, some are using this technology for educational purposes (Salemi, 2006).

A similar arrangement for support of player development and continuing education also exists in the National Football League (NFL). Though some league-wide orientation, education and career development activities exist, it is largely the responsibility of the local player development coach to work with players in planning their continuing education efforts. The importance of degree completion is stressed and information about degree completion options are part of the annual Rookie Orientation required of all first-year players in the NFL. For example, the New York Giants have had a long-standing relationship with Fairleigh Dickinson University in New Jersey.

Professional baseball, which frequently drafts players right out of high school, has not been as pro-active in promoting continuing education activities for players. Likewise, given the minor league system and the frequent practice of trading players, higher education plans are left up to the individual. However, Richard Atros, academic adviser to the New York Mets has worked with players within their system in conjunction with an online program through Drexel University (Salemi, 2006). Al Leiter, a major league pitcher completed his degree through the distance learning program at Penn State University as did Jamie Moyer at Indiana University. Institutions with aggressive online distance learning programs such as Troy University and the University of Phoenix are also increasingly seeking to serve the needs of professional athletes.

In discussing distance learning and degree completion programs with player development representatives in professional sports, access to courses in asynchronous formats, including iPod, DVD or pod-casting was of particular interest. Continued educational development is considered an important component of professional success and personal stability.Therefore, professional athletes represent another specialized niche population amenable to both online and offline educational options.

Conclusion

Distance education strategies for remotely deployed, highly mobile, or institutionalized populations have been reviewed and critiqued. Specifically, asynchronous, offline responses for special military units, Native Americans on remote reservations, prison populations and other geographically, temporally or technologically isolated niche populations have been explored. In addition, new markets for offline, asynchronous learning exist in prisons, in the field of athletics and in other populations.

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