Cover Page

Article Title: Distance Education Policy: Facing the Issues of Access

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Distance Education Policy: Facing the Issues of Access

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Abstract

Can distance education (DE) bridge the digital divide between the information technology "haves" and "have nots"? Many purport that distance education may be a possible solution to the impending problem of higher education demand, but are higher education policies assisting colleges and universities in meeting the increased demand with equitable and affordable DE access for all, including those with disabilities, lower socio-economic status, or varying racial backgrounds? A review of the pertinent research from various national authoritative bodies like the National Centre for Education Statistics, the US Department of Education, and the US Department of Commerce National Telecommunications and Information Administration document the disparities of DE access and policy shortcomings. A comparison of existing DE policies from the Western Governor's University, the Southern Regional Educational Board, the United States Distance learning Association, the American Association of University Professors, and the American Council on Education is also critically analysed. Efficacious DE policy recommendations with respect to access are posited that incorporate a discussion of the crucial support structure necessary for successful DE programs.

Distance Education: Facing the Issues of Access

Can distance education (DE) bridge the digital divide between the information technology "haves" and "have-nots"? Several claim that DE and its variants have the potential to provide equity of access to information on a global basis in the 21st century and an overwhelming array of life lifelong learning opportunities (Ruppert, 1998; Willis, 1994). This prediction made over six years ago is now considered more attainable today than ever before. Some individuals even claim that DE is hastening the pace of higher education reform (Lewis, Snow, Farris, Levin, & Greene, 1999).

Defined, distance education involves instruction delivered over a distance to one or more individuals who are separated by time or place from the instructor (Lewis et al., 1999). Research by the International Data Corporation (IDC) predicts that by the year 2002 more than 2.2 million American students will be enrolled in distance education with DE courses representing 15 percent of all higher education courses. IDC also reports that the DE market is growing at an annual rate of 33 percent (Lau & Gorman, 1999). Others project that the growth of overall postsecondary education applications will double by the year 2020 (Policy, 1998). Given these projections, how will higher education accommodate the demand and provide access to all that desire it?

Many purport that distance education may be a possible solution to the problem of higher education demand. If this is the case, are higher education policies assisting colleges and universities in meeting the increased demand with equitable and affordable access to postsecondary education and life-long learning? Is participation in higher education limited to those who can afford the technology and training regarding its use? What about learners with special needs? Are those with disabilities being

permitted access to this new learning technology in a manner consistent with the general population?

It is the contention of this paper that many policy initiatives in technology-based distance education are inchoate in striving to increase "equitable" availability for all. In effect, technology seems to be more an engine of inequality versus a conduit for increased accessibility. This appears to be especially true for certain minority groups, those of lower socio-economic status, and for those with disabilities.

Technology and the Promise of Access

The most recent 1999 DE report by the National Centre for Education Statistics (NCES) found that the number of U.S. course offerings in DE has doubled from 26,000 to 52,000 over a period of just two years. NSES also reports that the biggest promise for DE is in its ability to offer entire degree and certification programs online without a student ever stepping foot on campus (Lewis et al., 1999). The American Association of University Professors (AAUP), in their online guidelines and suggestions for distance education, state "distance education is not a future possibility, but a current reality where growth potential is virtually unlimited" (Issues, 2001). While these statistics and statements may indicate the successful deployment of distance learning and the acceptance of this instructional method, other DE statistics are more foreboding.

A common malady of DE programs is sky-high attrition rates. Typical course completion rates for distance courses are as low as 50 percent (Carr, 2000; Education, 2000; Publications, 2000). Couple the rising demand for higher education with the increasing cost of on-campus attendance and one sees the inherent problem facing distance learning.

In March of 2000, the American Council on Education (Division of Public Affairs) issued a report discussing core DE policies to be examined from an institutional perspective. Besides intellectual property, delivery, liability and accreditation issues, student access has also been enumerated as a key area of concern (Education, 2000). Given the aforementioned importance of DE access coupled with the startling data of growth and attrition, those involved with the creation and implementation of DE policy must remain apprised of the current issues and trends in this dynamic field.

Access and Affordability

 While the individual citizens of a society may not be equal, providing equality of access to education for all is at the foundation of a democratic society (Barley, 1999; Gladieux & Swail, 1999; Jones, Valdez, Nowakowski, & Rasmussen, 1994; Laboratory, 2001; Ruppert, 1998). It is this belief that drives many educational policy issues, and is an essential pillar for distance education decisions (Gladieux & Swail, 1999). But what is driving this surge in distance-delivered learning experiences?

Fuelling distance education is the exponential growth of the Internet and the advancement of networked computers (Administration, 1998; Association, 1997; Gladieux & Swail, 1999; Lewis et al., 1999). A recent article by the College Board located in Washington, DC looked specifically at the access issue with respect to DE and asked if new DE technologies would expand access to higher education for traditionally underrepresented groups (Gladieux & Swail, 1999). The College Board suggests that while overall aggregate enrolment numbers of students in DE is on the rise, it is still unclear if those under-served by the education community are similarly increasing (Gladieux & Swail, 1999). Worse yet, it suggests that there may be an

increasing divide between those that have access and those that do not. The College Board suggests that while computers may appear ubiquitous, not all students have computers or Internet access and many do not have the competency skills to utilize the technology (Gladieux & Swail, 1999). The following research reports and statistical briefs recently reiterated similar disparity concerns:

1. American Council on Education reported titled: "Developing a Distance Education Policy for 21st Century Learning" (Education, 2000).

2. The CEO Forum on Education and Technology reports on "School Technology Readiness" (Technology, 1999, 2000).

3. US Department of Commerce National Telecommunications and Information Administration (NTIA) "Falling Through the Net" Reports (Administration, 1995, 1998, 1999, 2000).

4. National Centre for Education Statistics (NCES) 2001 report: "Internet Access in U.S. Public Schools and Classrooms: 1994-2000."

Looking back briefly, in 1997, only one-third of American households with income between $25,000 and $35,000 had computers. Also during this time, only one-sixth of American households with incomes under $15,000 had computers. This was in stark contrast to the three-quarters of American households that had computers whose income is above $75,000 during the same period (Administration, 1998; Gladieux & Swail, 1999). While updated survey results show this gap significantly diminishing in recent years, in 2000, the NTIA claimed that the digital divide was still a very real concern, with disparities expanding between certain racial populations (Administration, 2000).

From 1997 to 2000 the growth of computer ownership and Internet access penetration rates attributable to income and education between Caucasians, Asian Americans and Pacific Islanders were exhibiting significantly faster growth rates in computer ownership and Internet access as compared to African-Americans and Hispanic populations in the United States (Administration, 1999, 2000). Similarly, the 2000 NTIA Commerce study found that the rate of growth for household Internet access in cities failed to keep pace with the national or rural rate of growth over the same time period. Now, using the latest 2001 survey data, the NTIA found that while the national percentage of households with Internet access has continued to significantly increase, still 49.5 % of all households in the US do not use the Internet (Administration, 2002). Unfortunately, those segments of the population not using the Internet are:

People in low-income family households. Seventy five percent of people who live in households with income less than $15,000 do not use the Internet. Even those with incomes between $15,000 and $35,000 only have 67 percent of the households using the Internet.

Adults with low education levels. Sixty percent of adults with only a college degree over the age of 25 do not use the Internet and 87 percent of adults with less than a high school education.

Certain populations of race. Sixty eight percent of all Hispanics and 86 percent of all Spanish-only speaking households to not use the Internet. Over 60 percent of all African American households do not use the Internet.

Even when issues of access might appear "equal," other criteria seem to the contrary. The CEO Forum on Education and Technology has reported studies where

even when the number and type of access might seem similar, students "may have unequal learning experiences," with lower income or non-English speaking students only using computers for mundane drill and practice versus higher order simulations or research experiences (Technology, 1999, p. 31). Unfortunately, the NCES found that while positive gains across the board nationally have been made with respect to Internet access within the classroom, significant disparities exist among schools in the highest poverty range (those schools where 71 percent or more students are eligible for free or reduced lunch) and those in the low-poverty classification (Cattagni, Farris, & Westat, 2001). In effect, schools in the highest poverty range showed a zero gain in this criterion of access from 1998-1999 (Zehr, 2000). In the same report the NCES also reported differences in the ratios of student to computer for high and low poverty schools. High poverty schools, while decreasing their ratio in recent years from 17 to 1 down to 9 to 1, still lag behind the national recommended average of 6 to 1students for every computer (Cattagni et al., 2001). Think about implications of three extra students attempting to share a computer. A shortfall of three in analysing this ratio difference might be metaphorically compared to a classroom having 24 desks and chairs with 27 children registered in the class. The three extra students would seem to make a significant difference in the amount of collaborative access time each student ultimately receives using the technology.

Finally, the Higher Education Research Institute (1999) recently examined public and private universities and colleges and compared the percentages of freshman that had previously used email before beginning their college degree. The study revealed that the percentage of freshman entering both private and public historically black

colleges and universities (HBCU) were significantly less than those attending non-HBCU public and private universities in the United States (Institute, 1999). For example, 69 percent (on average) of all freshmen attending non-HBCU public colleges and universities had previously used email as compared to only 41 percent of freshman attending public HBCU institutions (Institute, 1999).

Thus, when looking at access to DE, technology and the Internet, the disparity appears substantive along both socio-economic status and race. Many that could benefit from DE are unlikely to have the money, hardware or expertise to adequately participate. The "digital divide" concerning access to education then, is still a very real policy concern (Education, 2000). But who actually creates DE policy or influences the course of its development?

Distance Education Policy Development

Policy in distance education is created or significantly impacted by the following organizations: (a) educational institutions like the WGU or Southern Regional Educational Board Electronic, (b) professional associations like the USDLA, the AAUP, or the American Council on Education and, (c) government agencies like the US Department of Education or Department of Commerce. Educational institutions usually address DE policy issues at the state or regional level in a practical "hands-on" way, while acting in the best interest of their constituents, the students. Professional associations generally affect DE policy by creating overarching recommendations or policy standards, while government agencies seek to facilitate DE efforts through the creation and sponsorship of special flagship programs. The American Council on Education (ACE) in March of 2000 issued a report titled: Developing a Distance

Education Policy for 21st Century Learning. In this report, ACE enumerated the

following future DE policy issues with respect to higher education:

1. Intellectual property policies (how existing policies are implicated).

2. Ownership of distance education courses (faculty, institution, or third party).

3. Faculty issues (concerning workload credit, support, compensation, ownership and

right to use).

4. Student issues (increased access and affordability).

5. Limiting liability (copyright infringement and fair use exemption).

6. Commercialisation (partnering in whole or in part with for-profit organizations for

creation, delivery and evaluation of DE courses).

7. Teaching beyond state and international boarders (state approvals, transfer of credit,

accreditation, and financial aid).

      The AAUP in their statements concerning distance education addresses many of

these same policy issues (Issues, 2001; Professors, 1999). But what specifically has the

U.S. government done to foster equal access?

      The U.S. government has initiated several policies to fight the rising "digital

divide" tidal wave. First, President Clinton revised the Telecommunications Act of 1996

to include "E-rate" affordable access to the Internet for public schools. Also, the creation

of the School and Library Corporation in 1997 by the Federal Communications

Commission seeks to discount Internet access charges to public schools between 20 to

90 percent (Gladieux & Swail, 1999). Unfortunately, despite over 30,000 initial

applications for E-rate Internet access, the overall funding of the program has been

scaled back due to resistance from private telephone companies refusing to absorb the

subsidy expense (Gladieux & Swail, 1999). This typifies a common problem in policymaking, creating and implementing policy without the forethought of planning for appropriate funding.

In 1998, there were two higher education amendments by the U.S. Department of Education: (a) The Distance Education Demonstration Program (DEDP) and the (b) Learning Anywhere Anytime Partnerships (LAAP). First, the DEDP changed the laws governing financial aid for DE. Guidelines restricting the use of financial aid for virtual institutions (degrees earned entirely at a distance) has been waived for 15 pre-selected U.S. higher education institutions (Office, 1998). Specifically, definitions of the academic school year and hours spent in the classroom have been changed to allow the use of financial aid for online degrees. Six lead institutions incorporating over 26 colleges and universities and 18 organizations have received LAAP funding awarded for the fiscal period 1999-2001 (Education, 2001).

The LAAP awards competitive grants (up to three years in duration) for partnerships that collaborate in building and delivering quality distance delivered programs (Education, 1999). Technical schools, community centres, private colleges, public universities, school districts and private businesses have been encouraged to deliver quality distance learning opportunities. There are four major types of projects for which the DOE is seeking to provide 50 percent matched funding for: (a) developing and assessing model distance learning programs or innovative educational software, (b) developing methodologies for the identification and measurement of skill competencies, (c) developing and assessing innovative student support services and (d) supporting other activities that are consistent with the intent of part c above (Education, 1999).

The grants were awarded to 25-30 new institutions in the year 2000, and ranged anywhere from $100,0000 to $500,000, with an average grant of $333,333 per year (Education, 1999). In the last round of competitive LAAP grants awarded in 2001, six lead institutions received funding for a period of three years and involved dozens of intra and extra-university, business and community partnerships. A total of 6.8 million dollars in 2001 LAAP funding was distributed almost equally between the six lead institutions that receiving awards (Education, 2001). Financial allocation or redistribution of monetary resources is often needed move policy recommendations from theory to practice. This is an example of how policy is supported not only by actions, but also in the allocation of financial resources to discern "best practices" for DE (Office, 1998).

Innovations like the LAAP awards address increased access, but they are not intended to close all the access gaps of inequality throughout the United States. There are other unique demographic populations besides minority and low SES learners that face real issues of Internet access. For example, those with disabilities should also be guaranteed the equal access to education and the Internet.

Disability Access

Several efforts are underway to ensure equal access to DE and technology in general for all of America's 54 million persons with disabilities (Commission, 2000). The Web Accessibility Initiative (WAI) is a project coordinated by the World Wide Web Consortium (W3C) in conjunction with organizations around the globe to ensure that the web is accessible to those physically challenged (Consortium, 2000). The three major areas the WAI are working on are (a) tools, (b) education and outreach, and (c) research and development (Commission, 2000). For example, web pages may need

additional written explanatory captions for images that can be read aloud by the computer for those visually impaired as well as allowing the user to control the presentation of the web page (colour, text size and synthesized speech characteristics) (Consortium, 2000).

Another initiative sponsored by the U.S. government is The Centre for Information Technology Accommodation. The Centre is administering a policy called the Information Technology Testing for Accessibility Government-wide (IT-TAG) that involves the evaluation of hardware that is accessible for those with disabilities that serve in the US government (Stanton, 1999). Changes to the 1973 Rehabilitation Act (section 508) state that "all electronic and information technology acquired by the Government must be accessible except when accessibility would create an undue burden" (Stanton, p. 1). Beginning in August of 2000, this language was added to the Federal Acquisition Regulations (FAR) thus facilitating equal access for all to technology, including those learning at a distance within the government. FAR will do this by restricting the purchase of equipment to only that which meets their specifications.

Finally, with respect to access for the learners with special needs, the Federal Communications Commission has a Disability Rights Office and supporting web page which provides a plethora of links on current issues, policy statements, and late breaking news concerning technology access for those that are limited in sight, mobility, hearing, use of their hands, or learning disabilities (Commission, 2000). Unfortunately, even given the initiatives previously discussed, current policies could do more to decrease the digital divide and increase access to those under-served.

How Existing Policy Falls Short

Several institutional bodies have put forth recommendations for distance education policy support. In March of 2000, the Institute for Higher Education Policy (IHEP) released a study sponsored by the National Education Association and Blackboard, Incorporated to find the salient benchmarks used by respected distance learning institutions. The study involved the interviewing of six major institutions in the DE arena as well as a comprehensive review of the literature. The intent of the study was to assist policymakers in making reasonable and informed policy decisions on major distance education issues (T. I. f. H. E. Policy, 2000 a).

Distance education benchmarks were determined in the following areas: (a) institutional support, (b) course development, (c) teaching and learning, (d) course structure, (e) student support, (f) faculty support and (g) evaluation and assessment (Carnevale, 2000; T. I. f. H. E. Policy, 2000 b). A detailed listing of each benchmark is available in the online report.

Distance education and technology policy, if it is to be effective at bridging the digital divide with respect to access, must do more than merely allocate additional capital towards the problem. Policies must begin to look at issues that will effectively increase the sustainability, scalability and accountability of their efforts. Specifically, DE policy makers should incorporate the following issues into their discussions: (a) address universal, affordable, and equitable participation in DE, (b) provide high quality access to exemplary instructional learning experiences that are linked to high standards of student achievement and ancillary support for all, (c) coordinate with business the appropriate choices of technology and skills acquired to facilitate the transition from

school objectives to workplace competencies, and (d) commit the resources necessary for sustained teacher professional development, course development, administrative support and ongoing maintenance of the technology infrastructure (Jones et al., 1994; Technology, 1999).

In 1997, the United States Distance Learning Association (http://www.usdla.org) proposed the following policy recommendations (Association, 1997):

1. Require that teacher preparation institutions restructure pre-service and in-service programs to recognize the importance of integrating communication and information technologies in education.

2. Encourage regional and professional accreditation associations to recognize and accept as commonly as traditional education the appropriate uses of distance learning technologies.

3. Continue active consensus building with industry and educational leaders as rule-making and implementation proceeds to ensure rapid deployment and effective use of educational infrastructure.

4. Continue to support program development, including distance-learning options, to ensure quality learning materials will be available over the nation's expanding educational networks.

5. Maintain the protections for copyright holders and users that exist in current legislation and agreements in any rewrite to accommodate the digital technology.

6. Include the present exemptions for the "rights to control, display and perform" which are available for analogue distance learning in desktop (computer) applications of distance learning (p. 5).

In addition to these DE policy recommendations, the USDLA also stressed the importance for local, state and federal governments to provide support in the following areas: (a) staff training in technology use, (b) affordable access for Internet connectivity and (c) maintaining "set asides" of wireless bandwidth for educational purposes (Association, 1997). An authentic case study should lend additional insight into current DE policies.

We concur with the recommendations presented by the USDLA, and encourage leading DE policy authorities, like the USDLA, to move beyond the mere declaration of goals, however worthy, to tangible action steps that move policy vision to practice. For example, translating the goal of developing quality distance learning program materials is easier said than done. All too often DE course development is using automated web conversion tools to quickly convert PowerPoint slides and lecture notes into a web-based format, tossing in a threaded discussion or chat tool and an online multiple choice quiz and then present this as an effective distance education course offering.

We should seek to assimilate the best blend of affordable and available delivery mediums (Internet, ATM or web-based video conferencing, CD-ROM/DVD, print) with the appropriate mode of delivery (asynchronous, synchronous) coupling this with the best instructional methods described below to design the most efficacious DE learning environment (Head, Lockee, & Oliver, in press).

Constructing quality distance education materials involves designing measurable learning outcomes that incorporate engaging learning methods and strategies like case study analysis, panel discussions, debate, authentic problem-solving, student-lead teaching opportunities, role playing, and collaborative projects that incorporate positive interdependence with individual accountability (Johnson & Johnson, 1996). Distance education program opportunities should also address the entire support structure that is available to similar students engaging in programs on a physical campus like student counselling and tutoring, advisor mentoring, advance job placement, financial aid, library resource accessibility, registrar services, bookstore purchasing privileges, and technical support issues (Lockee, Moore, & Burton, 2002) . In addition to student support services, DE programs would be well served to address appropriate instructional support for faculty in the development, management and delivery of DE opportunities. Merely offering a template-derived DE course devoid of these design considerations fails to address the necessary structure for effective DE learning.

A Working Example

Started in 1996 as a collaboration between private industry and higher education, the Western Governor's University (WGU) wanted to: (a) significantly increase access, (b) shift assessment of student knowledge from "seat-based" learning to competency-based learning, and (c) implement a "market-driven", learner-centred approach to higher education (Berg, 1999). In offering a complete degree program online this regional consortium of Midwestern states also had to tackle difficult policy issues such as accreditation and transfer of course credit outside of the Governor's University.

Shifting the focus of student credentialing from seat time to knowledge and skill competencies required a major paradigm shift from the existing way universities currently determine graduation and degree certification. In effect, the Western Governor's University uses four premises for student competency-based assessment (Berg, 1999; Policy, 1998; University, 2000):

1. Assessment will be developmentally based through ongoing diagnosis of each student versus just an end- of-course test.

2. Assessment will be non-exclusionary and open to all.

3. Assessment will be non-punitive, thus giving permanent credit for sections of the test that are passed.

4. Assessment will be portable, in effect assessing the transfer of skills and knowledge in multiple settings.

Although, some fear that shifting credentialing from a quality-credit hour (seat time) based program to an outcome-based credentialing system will place an overemphasis on assessment and shift the focus away from the essential contact hours needed to foster student learning (Berg, 1999; Policy, 1998). The issues relating to assessment and course credit are not easy ones, but regional DE models like the WGU and the SREB are providing examples for others to examine.

Another issue for the WGU involved that of securing federal and state financing that is traditionally awarded to on-campus universities. The usual method for determining federal or state aid to higher education is by analysing the number of "clock-hours of instruction" (Berg, 1999). If WGU ignores "clock-hours" and focuses just

on student competencies, the issue becomes axiomatic. How will WGU receive funding if they have no "clock-hour" measurement scale?

Several policy initiatives have been addressed to rectify the WGU funding issues. First, WGU is seeking formal accreditation from the Inter-Regional Accreditation Committee (IRAC), which if accepted, will allow WGU to qualify for federal and state funding (Tejral, 2000). WGU gained "Eligibility for Candidacy" from IRAC in May of 1998 (Berg, 19999), and is currently at the second tier, "Candidate for Accreditation," of a three tier IRAC accreditation process (Tejral, 2000). Finally, WGU was one of 15 DE institutions to be selected for the US Department of Education, Office of Postsecondary Education, Distance Education Demonstration Program (DEDP) (Education, 2000). As referenced earlier, DEDP participating institutions and the WGU, now have a waiver allowing them to receive federal monies from student grants and loans (Education, 2000). Prior to the DEDP, virtual campuses with no physical domicile had difficulty receiving federal student subsidies.

There is still a more subjective issue facing WGU, that of the commercialisation of higher education (Berg, 1999; Policy, 1998). Partnering with companies like Microsoft, GTE, Fujitsu, and Hughes Electronics Corp, some fear that a market driven education will become concerned with bottom-line profit versus the educational needs of student (Berg, 1999; Education, 2000; Policy, 1998). In essence, how will the issue of governance among for-profit and non-profit entities be resolved? Presently this question has no single answer. However, in the not too distant future, governance between profit and non-profit players will most likely form an amalgamation, being driven by increasingly competitive market forces. In summary, the issues facing institutions and

corporations competing in the DE arena are varied and complex, and require formative evaluation and revision protocols to ensure maximum efficacy.

Conclusion

There are many DE policy issues facing our nation. While the shear number and complexity of the issues is not insurmountable, DE policy decisions become extremely difficult in the compressed time frame allowed to rationalize appropriate decisions. Hyper-evolution of technology and the Internet, as well as the perception of fierce competition in the DE "business-market" is impeding the logical decision-making. There seems to be a "winner take all" attitude in DE, emphasizing that if institutions do not jump on the DE bandwagon now, they will be unable to enter the market successfully at a later time. Alternatively, we conjecture that a delayed entry into the DE market is not deleterious, but sound decision making from both a financial and educational standpoint.

With the US dot.com industry imploding into the dot.bomb industry within the last several years, being first in the e-market place doesn't necessarily ensure automatic success or longevity. A similar consolidation is occurring within the e-learning course development and management providers (Dobbs, 2001; Raths, 2002; Schelin, 2001a, 2001b). We feel it is more appropriate to offer a small venue of well designed and properly supported DE opportunities versus stretching resources thin by focusing on increased numbers of students or course offerings. Quality instructional design with formative and summative evaluation coupled with the necessary support mechanisms discussed within this article will help ensure sustainable and scalable enrolments. Also, given the volatility and consolidation occurring in the e-learning industry presently, a late

entrant into the e-learning market place with a well-designed product may "leap frog" existing DE learning portal design and offerings, capitalizing from predecessors' mistakes and capturing necessary market share.

Thus visions of increased efficiency, effectiveness, access and "market forces" seem to be driving the meteoric rise in DE (Policy, 1998). The issues of access and affordability are foundational hurdles that must be addressed should the promise of distance education seek to fulfil its loftiest goals. Clearly, if policy makers are to reach this goal, there is much more yet to be done.

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