

Supply and Demand in Distance Education: Unanticipated Consequences

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Abstract

The success of online distance learning (ODL) is unique in the way it has quickly transformed the culture of education at every level. Longstanding barriers of accessibility have been breached enabling working adults with multiple responsibilities to finally have a means of participation that simplifies engagement and sustains involvement contributing a new dynamic to social and economic opportunity. While it may have been assumed, based upon historical precedents, that ODL would exist complementary with other educational modalities, it now appears that, with respect to programs of study closely articulated with continuing career development, ODL may entirely supplant the conventional, face-to-face model. This is based upon student demand and the increased institutional capacity to meet these needs.

Introduction

In the Spring 2011 semester I taught a new graduate course “Legal Issues in Higher Education” using a blended format combining face-to-face with substantial online instruction. Although I was satisfied with the academic outcomes, what surprised me most was the overwhelming preference, energetically expressed by my students, for online instruction, even by those who were employed at the university and who were therefore not compelled to commute to class after work. Moreover, this preference appears to be widespread among many of our school’s students, extending throughout the curriculum to the point where it has become difficult to sustain traditional, face-to-face (F2F) evening classes in certain programmatic areas that target a working adult population.

Nationally, as early arguments concerning quality and faculty participation have subsided, enrollments in online courses have steadily grown to the point where it is predicted that by 2014, students in formal higher education (US) will have taken at least one ODL class. Online enrollments within non-standard and informal settings will certainly dwarf this number.

The overwhelming popularity for elearning at Stony Brook’s School of Professional Development (SPD) was both gradual and incremental. Looking back, its seemingly irresistible progress took me by surprise since I had always assumed that F2F and online would peacefully co-exist, side by side, reflecting predilections for acquiring knowledge (Gardner, 1993) and issues of student convenience. My original projections were that distance learning enrollments overall would not exceed 1/3 of the total. Currently it is at 42% and still trending upwards.

What appears to have occurred in the realm of part-time higher education, is the inexorable abandonment of the physical classroom, except in singular circumstances which apply to a steadily diminishing minority. These might include aversion to technology, the psychological dependence on the presence of an

instructor and other students, disability or lack of access to computer technology. And in today's world of customer driven curricula, designed to be financially self-sustaining, the necessity of critical mass is merciless and will act to curtail supply when demand is inadequate.

A similar tendency is emerging in K- 12 education (Christensen, Horn & Johnson, 2008; Maeroff, 2003) where online education is viewed as an alternative for students whose needs cannot be accommodated in the classroom. Maeroff, especially, looks toward a future of individualized education, or as he states a "classroom of one" where online education is no longer the exception, but instead the norm.

Factoring in the necessary technology and human capital investments essential to the success of ODL, might we find ourselves confronting a situation where online education becomes the sole option for some part-time students? This paper explores a number of the key issues raised by what appears to be the inexorable growth of ODL and the choices educators may be compelled to face in the light of the economics of supply and demand and their own educational values.

The Diffusion of Distance Learning

Everett Rogers' theory of innovation diffusion (2003) posits a cascading flow of acceptance from "innovators," "early adopters," "early majority," "late majority" and ultimately to "laggards." Presently, I estimate that we have reached the "late majority" phase with an 84% acceptance of ODL among higher education institutions. The Pew Center's just released report, "The Digital Revolution in Higher Education" (28 August 2011) indicates that 89% of four-year public colleges and universities and 60% of private schools offer some online courses.

Another, more recent, succession paradigm is presented by Sherry Turkle (2011, p. 219). In comparing the popularity of emails v. telephone calls, what was initially

viewed as being “better than nothing” (email) is now accepted as “simply better.” This readily analogizes to the preference for online courses.

Christensen’s (2000) by now, well-known theory of disruptive innovation presents analyses of industries where new providers, addressing the low end of their respective markets, are able to find a substantial niche for a basic product that can economically satisfy customer demand. The new product, although clearly inferior to the traditional product is “more affordable and easier to use” (Christensen & Eyring, 2011, p. xxiv) and attracts a previously underserved market.

Applying this theory to higher education, Christensen maintains that many colleges and universities have inadequately served working, adult students by insisting upon on-campus, F2F evening programs. Distance education, by contrast, offers asynchronous instruction thereby freeing both students and faculty from rigid scheduling formats. ODL is also a “boon” for those who were previously non-consumers. And as online quality has improved, it developed greater appeal for traditional students too.

Christensen describes the “unbundling” of higher education, with providers separating its constituent parts, especially teaching and research. It is no longer unusual to find colleges who are exclusively teaching institutions, even going so far as to assign the development of courses to “course authors,” as distinct from those actually doing the teaching. In these situations, faculty are purely instructional. The model, used for decades in Britain’s Open University has now spread worldwide.

In the United States, the University of Phoenix has popularized this strategy and can be credited with catalyzing a national movement toward standardized university classes, modular scheduling and, above all, the aggressive use of online learning technology.

Despite recent allegations of questionable recruiting, Phoenix’s market driven approach to higher education characterized by a factory-like production model has shifted the US’s higher education landscape by dramatizing the benefits of

rethinking the older “craft” model, wherein individual faculty exerted control of teaching and could resist efforts of reform.

Another form of disaggregation proposed by Brown and Duguid (1996) cited in McCaffery (2010, pp. 74-75) is based upon 4 separate elements: degree granting/accreditation; academic staff/teaching; students/learning and facilities/campus. This scheme takes a structural view of university organization and processes and may offer greater analytic power in assessing the force of online learning exerted upon the traditional model.

Digitizing Daily Life

It is easy to forget that progress toward a digitized society was initially fraught with resistance. But the value of automated banking, internet based shopping, and the ability to communicate swiftly by email, to identify only a handful of applications which, in short order overcame opposition. The smart phone revolution has further demystified web based communication for a countless number of users, joining within a single instrument phone, entertainment, text communication, searching the web, global positioning and thousands of other never before dreamed of applications seemingly appearing on a daily basis.

Compared with as little as ten years ago, elearning is now more readily understood and accepted. Its rapid adoption by higher education and other similar providers, and its clear advantages over traditional learning models has continued to fuel demand so much so that barriers to further expansion, for the most part, largely consist of adjusting supply to meet demand.

At least for the short term future, the next 5 -10 yrs, we can project the continuation of present trends, that is, until new technological developments make possible the emergence of a breakthrough, more appealing and convenient, instructional models. A way to think about future advances is to identify shortcomings that are currently present and widely acknowledged, especially by distance learning students. For

example, one of the most frequent complaints is the inability to “see” their classmates and instructors. Skype and Adobe Connect are early examples of how this need is currently being addressed. Other areas of major dissatisfaction include unreliability of course management systems, the absence of help when needed and faculty inaccessibility.

But it is certain that more fluid, flexible, true-to-life software alternatives are in the offing. Large screen tablet technology, with excellent, improved picture quality and apparent fidelity to real life, will surely contribute to the multi-dimensionality of online instruction. These innovations, coupled with greater bandwidth and 4G technologies allows us to envision a seamless union of synchronous and asynchronous instruction, allowing faculty and students to communicate in both modalities. In a benign variant of “flash mobs,” technology will permit students and faculty to quickly determine their availability for a real-time, synchronous online class meeting. Faculty may choose this option when an online class requires some “face” time for a particularly thorny subject. And students may use it to convene real-time study groups.

It is expected that as colleges become more dependent upon online course generated revenue, greater attention will be paid to improving student support services and in faculty preparation.

Growing online verisimilitude will foster the spread and acceptance of schools that offer online programs exclusively. These prototypes already exist in Western Governor’s University and are prolific in the for-profit sector. Affordable technology, the persistent need for specialized knowledge and the imperative of convenience has created a fertile environment for small-scale higher education start-ups, a virtual silicon valley, if you will, for higher education. Whether or not these new providers offer credit, mechanisms current exist to convert non-credit to credit, and to assemble credits gathered from disparate sources into a single transcript, and ultimately a college degree.

An example of a traditional university unintentionally going “viral” with a course offering is Stanford. As reported by Jie Jenny Zou in *The Chronicle of Higher Education* (August 2, 2011) two Stanford professors opened to anyone on the internet online admission to their fall semester course on artificial intelligence (AI). Over 109,905 potential students responded (*LI Newsday*, 21 August 2011). *The Chronicle* reports that the experiment in “massive open online courses” is a further illustration of the possible reach of distance learning. According to one of instructors, in words similar to those used by Turkle, “It’s not quite as good as being there in person, but close to as good.” Although the article does not indicate if tuition or fees will be assessed, it is certain that a suitable pricing model will develop. And if the logistics of these massive courses can be effectively administered, it may be that this new revenue stream will be used to support less popular, and therefore more expensive, courses and programs.

This is precisely what has occurred at Southern New Hampshire University (SNHU) where a robust online program, run as a profit making business, supports SNHU’s financially strapped, traditional, liberal arts undergraduate program that caters to traditional age college students. (Parry, 28 August 2011).

The Paradox of Expanding Choice

Why should we care about this new topography? If it reflects what students want, is academically acceptable, and economically feasible, is there an obligation to provide choice, even where demand for it is presently lacking? These questions are being raised throughout higher education, not just online learning. Within traditional colleges, the continuance of expensive, unpopular majors has forced a reconsideration of the traditional liberal arts model, itself a creation of an earlier social consensus on what it meant to be a “well educated” person. Lack of student demand in certain areas has also compelled a reexamination of faculty tenure, with a growing preference for a more flexible, contingent academic workforce composed of part-time, adjunct and renewable term faculty.

The advent of today's career driven higher education model, fueled by consumer demand, creates its own disciplinary and departmental winners and losers and is undoubtedly bringing about an academic configuration that is just as unbalanced as the earlier liberal arts model which eschewed any concessions to vocationalism. For that reason does it make any sense to engage in a Proustian lament for things lost, and a desire to turn the academic clock back twenty or more years? Nevertheless, it is impossible to escape the irony, and paradox, that in expanding student choice and participation in higher learning through OCL, we set in motion a chain of events that limits options for some students.

Now that the success of online education appears assured, it is perhaps possible to acknowledge some of the yet to be replicated unique aspects of F2F courses. These include here and now verbal exchanges offering immediate feedback from faculty and students clarifying difficult to understand material; spontaneity and the emergence of unanticipated ideas which are capable of energizing and inspiring class participants; and communication unhampered by unreliable technology immediately come to mind. But, even if this list were to be expanded, it would still be slender compared with what has been gained by means of distance education.

Questions remain however, whether or not some vestiges of traditional instruction can or should be retained?

Preserving F2F Instruction in Content Areas Threatened by ODL

I have briefly sketched out, below, a number of scenarios that either make possible F2F instruction or establish a rationale in favor of its retention.

- The redeployment of revenue generated by online courses in support of traditional F2F offerings at USNH was mentioned earlier. In itself, the use of profit centers to offset losses generated by cost centers is not a new idea. However, the scale and success of USNH's project is sure to influence other private universities who are finding it difficult to stay afloat, unlike first tier private universities.

- Another option is to introduce a variable pricing structure charging higher tuition or added fees for traditional classes. This would lower the enrollment threshold required for viability. Universities already assess fees for all manner of services- parking, health, materials, technology, student activities, etc. Additional charges for F2F courses would simply reflect the higher costs associated with small in person classes. Moreover, differential pricing structures are commonplace in all manner of industries.
- There is also the possibility of attracting grant and other forms of external support from government or business in situations where there is a defined cohort and a strategic need to preserve a program, for example one teaching a rare language used only in an important conflict zone. (See “Cutting Back on Kazakh,” Inside Higher Education, 2 September 2011).
- Certain populations, whose unique demographics favor classroom instruction, including university programs for the elderly, retired and third age. In person courses help these students overcome isolation and provide a supportive peer group environment.
- When urban density can assure that a sufficient number of students will live nearby and convenience, as a consequence, favors being physically present.
- “Dual delivery” models that make possible a “conference” class wherein all students—in-person and at a distance—can see and hear each other in real time and faculty may continue to teach in what is close to a traditional classroom setting.

Necessity will without doubt contribute many more examples to this list. In the meantime, those among us who take a pragmatic view of higher education as an instrument of social change should take note of the supply and demand dynamics we have set into motion. There is always a need to recalibrate based upon new data, even if in doing so we must question the prevailing orthodoxy of our own construction and its fundamental principles.

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