

Open Learning Meets the Business of Education: Trends in Distance Learning

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Our current systems of education are in place for a reason – primarily because they have responded to longstanding societal needs. The rapid rise of distance education can also be explained by its success in addressing important but hitherto unmet needs of convenient access and flexible delivery. In this paper we review a number of trends or forces affecting the current practice of distance education. These forces are described as either conservative or progressive in nature. Conservative trends help educators better control processes and outcomes and achieve cost efficiencies in delivery. Progressive trends open up new possibilities in thinking about education and encourage diverse ideas and outcomes. Looking forward, future distance-education practices can be expected to exploit new technologies to further both conservative and progressive ends. The ongoing tension between control and efficiency on the one hand, and creative innovation on the other, is healthy and will continue to shape best practices in the field.

Keywords distance education; open learning; distance learning

1. General remarks

This paper provides a broad-stroke overview of many of the forces currently shaping the practice of distance-education. These forces both shape and are shaped by practice, since they are aspects of that practice. To bring some order to the analysis, we distinguish conservative trends and forces from progressive ones. *Conservative* forces help to bring a level of control, efficiency, and accountability to distance education. For example, course management systems like Blackboard are designed to help beginning online teachers develop course resources. The tool helps the teacher do expected course activities quickly, but may not encourage the teacher toward innovation or creative learning activities. By contrast, *progressive* forces open up possibilities for new visions of learning and teaching. Their net impact leads to innovation, creativity, and a departure from status-quo practices. Social networking sites and resources might be an example of a progressive practice whose impact on distance education may destabilize traditional notions of fixed-content courses and teacher-controlled learning activities.

2. Forces Impacting Distance Education Practice

Table 1 presents forces in two columns according to their projected impact on practice. Note that many of the items are new on the scene, so in that sense they are innovative. But their *impact* may be essentially conservative, reinforcing established practices or facilitating greater efficiency and control of instruction. We should also note that many of these forces have complex, systemic relations with practices, and that full impacts are never known at early stages – a lesson too seldom acknowledged in the history of instructional technology. The eventual movement toward learning objects, for example, likely will have a variety of impacts, some of which may lead to cost efficiencies, but also to creative changes in content delivery and instructional interactions.

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Table 1 Key forces impacting the practice education, distance learning, and the use of learning technologies in education.

Conservative Forces - leading to greater efficiency and accountability in processes and outcomes	Progressive Forces - leading to more innovative outcomes and creative processes
<p>TECHNOLOGIZING OF INSTRUCTION</p> <ul style="list-style-type: none"> •Design curriculum around competencies and standardized assessments •Align learning outcomes, assessments, and methods •Align resource allocation with performance goals •Regulate processes and methods •De-professionalize the teacher's role •Create templated, modular, re-usable learning assets •Digitize everything, making resources archivable, searchable, replicable, linkable, and modelable <p>THE EDUCATIONAL MARKETPLACE</p> <ul style="list-style-type: none"> •Let the business side of education predominate •Convert instruction into a commodity •Disaggregate products and services •Leverage efforts into sustainable economies of scale •Encourage free-market participation of commercial interests 	<p>LEARNER- AND USER-CENTERED PHILOSOPHIES</p> <ul style="list-style-type: none"> •Provide convenient, anytime/anywhere access •Give people choices about their learning •Design for active, engaging learning •Respect diversity and unique needs of the learner •Support digital natives in their learning styles and preferences •Integrate field-based and informal learning experiences •Encourage social learning through modeling, collaboration, and learning communities <p>OPEN LEARNING AND CONNECTIVITY</p> <ul style="list-style-type: none"> •Acknowledge the Web as a liberating and empowering force •Privilege open source over commercial •Encourage Web-based knowledge production and sharing •Support communities of practice and social networking •Acknowledge the growing role of the uncredentialed independent pundit

We note that a technology often evolves over time, starting out as an innovation, for example, and being co-opted into established practice as people assimilate it into existing patterns of work. For this reason our list of forces is presented at a fairly general level, focusing on key paradigms or perspective on education, within which particular technologies must be adapted. We have worded the bullets as prescriptions to reflect the action implications of each perspective.

2.1 Conservative Forces

Usually, when people talk about trends and futures, the emphasis is on innovation. The future is about the new, almost by definition. In contrast, we begin with established forces that most of us take for granted, but which in large part form the rational underpinning for our current systems of education. Understanding these existing forces can then shed light on the occasional tensions introduced by new technologies and their accompanying cultures.

2.1.1 Technologizing of Instruction

In simple production terms, education is in the business of taking raw material (unskilled, unknowledgeable students), processing those students, and outputting graduates with the knowledge and skill they need. Seen this way, improvements can be made when we are very explicit about the goals of instruction

and measures of those desired outcomes. This view of instruction has roots in 19th century industrial processes and is sometimes called an *efficiency* model of curriculum [1].

Trends within the United States and across most developed nations reveal clear movement toward this efficiency view of instruction. We term this movement a "technologizing" of instruction because the technical aspects of the educational process are emphasized. Curriculum is designed around a fixed set of core standards or competencies. Student achievement of those competencies is assessed at regular intervals. Based on that assessment, adjustments are made at all levels (student, teacher/classroom, district, etc.) to improve processes and outcomes. Moreover, resources are allocated based on their payoff potential in improving outcomes [2]. Instructional methods are similarly aligned to system goals and assessments. Improvement of instruction is defined in terms of effectiveness or efficiency, but rarely in a way that questions the target outcomes themselves.

In this more regulated, controlled mode of instructional delivery, the teacher finds her/himself in a complex role of having to meet a number of expectations, drawing on available professional knowledge and resources. General learning goals and key assessments are not under teacher control. Typically teachers do not choose their students and the special needs of those students. They must, however, see that each one of their students achieves the targeted learning goals.

The instructor's role also shifts somewhat in a distance-education environment. While many instructors are also the developers of the courses they teach, there are incentives to separate these functions. From a cost-control point of view, online courses should have instructor-facilitators guide the learning of students using carefully designed methods prepared by better paid design specialists. Similarly, templated course designs, course management systems, and re-usable content assets all are consistent with a technical, efficiency-driven model of instruction. These efficiency aspects of distance education can become essential counter-balances, since in other ways distance education requires *more* time and labor than traditional face-to-face instruction, particularly on the part of online instructors [3].

2.1.2 The Educational Marketplace

Education is primarily a service enterprise (as opposed to a product-based industry). It is one of the more labor-intensive forms of work; a typical school district in the US, for example, spends more than 80% of its budget directly on payroll. Moreover, education has tended to be fairly craft oriented, that is, the strategies and methods that make things really work are developed and fine-tuned at the local level, and are not easily disseminable. It is the very craft-like nature of education that has led people to look for ways to package and commoditize its offerings. As the global marketplace opens up exchanges, both commercial and social, educational entrepreneurs are seeking ways to turn its services into marketable products, and to find more cost-effective ways of delivering those products.

Enter distance education. Distance-delivered programs must be more carefully developed and packaged than residential program. Students in a distance-education program may sometimes get certain services separated or "disaggregated" from the overall educational package, and charged for those select services. A learner who doesn't need a credential, for example, may be offered a curriculum with fewer assessments and prerequisites. More commonly perhaps, a learner who comes in prior expertise may pay for a package consisting primarily of the assessment and credentialing services. Indeed the US Budget Reconciliation Act (passed December 2005) allows federal financial aid to for-profit institutions offering no classes at all, but rather granting degrees based entirely on assessments [4]. We expect to see more disaggregation of products and services online, to respond to requirements of different markets within the global marketplace.

2.2 Progressive Forces

The conservative forces discussed above are formidable and entrenched in their influence. We can expect educational systems to continue their focus on efficiency and profitability. At the same time, a number of forces pointing in more progressive directions are coming on the scene, discussed below.

2.2.1 Learner- and User-Centered Philosophies

For the past twenty years, a learner-centered philosophy of education has become the mainstream pedagogy among teacher preparation institutions in the United State, Europe, and increasingly in Asia. Teachers are taught and encouraged to educate the whole person, to meet the needs of every learner, to engage learners in meaningful, authentic activities that engage and challenge students to take responsibility for their own learning. Many curriculums are designed with constructivist learning theories in mind.

A learner-centered pedagogy, by definition, pays attention to the individual learner and that person's unique needs. In today's world that means increased attention to language needs, cultural/ethnic diversity, and differences in background knowledge, skills, and ability. It also means attention to the "digital native" phenomenon suggesting generational differences toward technology [5], which, although not well documented empirically, can serve as an important metaphor for understanding learner differences.

Teachers can feel overwhelmed by the expectations to reach out to every learner, and feel a loss of control as students are asked to take more responsibility. And again, as in the case of conservative forces, the desired end of progressive pedagogies can benefit from an infusion of technology. With the aid of technology teachers can more feasibly manage multiple teams and projects simultaneously, and provide resources and feedback as needed. While not a panacea by any means, technology, particularly distance-education technologies, can be put to useful service in addressing the needs of diverse learners [6].

There does seem to be some tension between a learner-centered orientation and a community-centered approach to online courses. A true focus on the individual learner, as in the form of self-paced, self-directed instruction, would take a very different shape from a typical course that seeks a level of social cohesion through assigned projects and group interactions. One resolution of this difficulty would acknowledge that learner-centered pedagogy includes attention to learners' active participation in larger groups and communities.

The paradigm shift to a learner-centric service orientation extends beyond pedagogy to include broader issues of delivery and access. Providing increasing choices to prospective students, and making learning resources more convenient and accessible anytime and anywhere, is consistent with corresponding reforms in business practices. The rise of learning management systems (LMS), for example, is part of this greater attention to individual needs and choices. In business environments, providers of products and services have come to understand the need to fully address customer needs and concerns. Distance education thus becomes a critical tool in addressing end-user needs and preferences, not only through any learner-centered strategies that can be integrated into courses, but through convenient and accessible design and delivery of programs.

2.2.2 Open Learning and Connectivity

As noted at the outset, we are still in beginning stages of the revolution caused by the digital shift and the advent of the World-Wide Web. Various labels have been used to describe this fundamental shift – a flattened world, distributed knowledge sharing, networking, globalization, the power of the Web. The core principles relate to how knowledge and participation (and hence learning) are distributed within web-like systems – and that new structures are emerging in response to that distributed world. Open theorists claim that "webby" systems work better for many kinds of problems than traditional closed, hierarchical systems. Fundamentally, the Web (known also by the current label of Web 2.0) has unleashed tremendous energy and potential, not just in education but in all sectors of society. Our educational future can be envisioned by trying to work out how distributed systems will take shape and do their magic.

Surprisingly, implications for distance education are not very clear. Is distance ed part of the new wave, or part of the establishment? Web enthusiasts are drawn to open education as an alternative to conservative, established forces, which in some eyes include course-based distance education [7]. Open education resources are "digitized materials offered freely and openly for educators, students and self-learners to use and re-use for teaching, learning and research" (see Wikipedia entry). Key elements of the open education movement are free access to digital resources in support of individuals and communities,

who draw strength from mutual interaction, sharing, and problem solving. Open educators tend to favor open source tools (like Moodle or Linux) over commercial tools (like Blackboard or Windows). They tend to challenge credentialing institutions by self-directed learning and alternative knowledge demonstration. They tend to value self-publishing bloggers and pundits over established opinion centers. These pundits are not often sources of new data or news; rather they are "re-mixers" or interpreters of the news, whose contributions lie primarily in their noticing and highlighting information, and the insights and value given to existing data.

3. Conclusion

Virtually any innovation will be systemically nested within a complex array of practices and inter-dependant effects, some fostering change and others reinforcing established practices. A very real difference exists in the *values* underlying the forces noted in our table. These values create tensions that will continue to exist as new technologies enter the scene and enter into conversation with existing practices.

Technological determinists point to the important causative power that new technologies exert on practice. We can observe these powerful effects over the past generation with the cultural changes engendered by the personal computer and the World-Wide Web. Technologies do indeed exert a causal impact on practice. At the same time, our analysis highlights the important of culture and ideology on how technologies are perceived, received, and shared within and among communities. Both the technology and the values within a culture play critical roles in shaping practice.

In this paper we wish to highlight a point made earlier: The future is not simply determined by the latest and newest technologies; rather, we work out our future by engaging in conversation with these new technologies and accompanying ideas. Conservative and progressive forces will continue to exert influence on practice, over time resulting in new practices and solutions to human needs. Distance education will continue to grow and be a part of that human response.

Acknowledgements This paper is based on a chapter in a forthcoming book on trends for distance-based learning communities, edited by Rocci Luppigini and published by Information Age Publishing. We thank these publishers for permission for adapt that chapter.

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