Why Not Reengineer Traditional Higher Education?

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INTRODUCTION

Just as the agricultural era gave way to an industrial society at the turn of the 20th century, an information society is now emerging as we move into the 21st century (Bell, 1993; Naisbitt, 1988; Toffler, 1980). With this shift in the means of production come drastic changes to every segment of society—including higher education (Rowley, Lujan, and Dolence, 1998). New delivery systems that increase the effectiveness of learning at a distance, new organizations such as virtual universities, and other models of teaching and learning are forcing higher education to change the way they do business (Mangan, 1998; Oblinger, 1997; Selingo, 1998).

Compared with that of the past 100 years, the rate of change occurring in society is unprecedented. There have been unparalleled increases in global competition, in customer expectations, and in new technology. These factors contribute to a lasting sense of crisis. Can traditional organizations in higher education respond to the changing environment by using the same approaches business has?

The traditional universities and colleges can be characterized as having: a residential student body; a recognized geographic service area from which the majority of student are drawn (a local community, a region, a state, or a nation); full-time faculty members who organize curricula and degrees, teach in face-to-face settings, engage in scholarship, often conduct public service, and share in institutional governance; a central library and physical plant; nonprofit financial status; and evaluation strategies of organizational effectiveness based upon measurement of inputs to instruction, such as funding, library holdings, facilities, faculty/student ratios, faculty qualifications, and student qualifications (Hanna, 1998, p. 69). However, technology is allowing non-traditional organizations to meet the curricular challenges many students are presenting (Whinston, 1994), including the need to develop learning materials that can be easily updated and configured for the particular needs of students, as well as the possibility of learning at any time and at any place. At the same time, the mode of industrial production within our society is being replaced with models that rely on the rapid growth in technology, an increase in the accessibility of information, a more critically aware population, and a shift from the production of goods to a service economy (Merron, 1995). These factors are causing significant change in education as well.
CASE QUESTIONS

• Consider fundamental changes in higher education from the past (e.g., coeducation) and the ways in which institutions of higher education responded. How are the changes brought on by the introduction of new technology similar or different?
• Does the introduction of new technology truly require a paradigm shift in higher education? Why or why not?
• In what ways are virtual universities forcing higher education to change the way it does business?
• What mechanisms are in place to facilitate reengineering in higher education? How is this similar or different from industry?

REENGINEERING IN BUSINESS AND EDUCATION

The development of national and international telecommunication systems has increased access to information and education. Customers now have many more choices than ever before. In business, the organizations that succeed are those that respond to heightened customer expectations within an increasingly technologically enhanced and fiercely competitive global market. In many instances, the first stage in their transformation was business process reengineering (Pappas, 1996). One definition of reengineering is:

“[…] the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service, and speed” (Hammer and Champy, 1993, p. 12).

Here fundamental assumptions are abandoned, old systems are thrown aside, and everything that is done starts over with a clean page. Radical redesign gets at the root of the issue, rather than making marginal changes to existing systems and procedures. It is not business improvement, but rather reinvention. It means a change in the very structure and culture of the organization. Dramatic change signifies quantum leaps in performance, not incremental changes. Reengineering is used to eliminate the old to make room for something completely different.

For much the same reasons that businesses have had to change, so must education. In general, the delivery of education via technology and telecommunication systems has increased global competition—especially from start-up organizations and non-traditional suppliers of education. In addition, students are much more knowledgeable about their options for access to learning alternatives, and therefore they have higher expectations than they had before:

Concepts of lifelong learning, individualized or personalized learning, and time-free, space-free “just-in-time” learning arrangements are emerging, all of which allow learning away from the traditional campus or worksite classroom. In this changing environment, particularly with the advent of learning at a distance, it is both difficult and exciting for students and institutions. . . (ACE, 1996, p. 5).

The combination of these factors has affected higher education to the point that some have considered that the very existence of the traditional university is in jeopardy.
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