

**THE UNIVERSITY AS LEARNING
ORGANIZATION: SOME PRACTICAL
APPROACHES**

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ABSTRACT

Twenty-first century universities that succeed will have to be lean, flexible, and nimble. In the corporate world, businesses are becoming learning organizations in order to survive and prosper. It is quite ironic that the university – the quintessential teaching organizations – does not know how to learn. Establishing a paradigm of knowledge sharing and continuous growth through lifelong learning is not easy even, or perhaps especially, in academe. This paper posits that it is necessary for the modern university to become a learning organization, and provides several mechanisms for implementing this transformation.

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INTRODUCTION

Traditionally a community of scholars, the university would seem to be the closest thing we have to a 'natural' learning organization. The modern university, however, with its hierarchical structure, immobile bureaucracy, inbred divisiveness, and mostly stagnant curriculum, is content to function as a teaching organization but is no more a learning organization than any other large institution – in government, industry or, even, education.

The rise of for-profit universities (*e.g.*, the University of Phoenix), decreased government support for universities, rising costs of education, the globalization of education, technological change, the need to cater to working adults who need continuing education to avoid obsolescence, and distance education are forcing universities to change. In fact, Andrews, Flanigan, and Woundy (2000) urge academia to respond to the “wake-up call” and recognize that inflexibility and the failure to respond quickly and decisively to environmental change can be dangerous.

It is becoming quite apparent that being inflexible and resistant to change in an extremely fast-moving environment is a prescription for disaster, whether we are dealing with a

business or academic institution. For colleges to change, they may have to learn to run their organizations in a more business-like fashion, adding and shrinking programs quickly, as needed. This is not easy when the organizational structure of today's university has more to do with the convenience of establishing accounting budgets than with the demands of intellectual growth and education (Gazzaniga, 1998; Hollander, 2000). Edwards (1999) notes that "the actual elimination of departments is extremely rare and usually generates a wave of unflattering national news, so the substitution strategy is driven toward less visible, more surreptitious methods."

Several visionaries believe that the university of the future will be very different from the university of today: more interdisciplinary programs and the substantial modification of the current prevalent academic organizational structure, *i.e.*, by academic departments. Duderstadt (2000) suggests that the university of the future will be divisionless, *i.e.*, there will be many more interdisciplinary programs. There will also be "a far more intimate relationship between basic academic disciplines and the professions." Duderstadt (1997a) asks "whether the concept of the disciplinary specialist is relevant to a future in which the most interesting and significant problems will require 'big think' rather than 'small think.'" Kolodny (1998, pp.40-41) asserts that the antiquated way of organizing colleges — by departments — will have to "evolve into collaborative and flexible units." Students with narrowly defined majors will have great difficulty comprehending a world in which the knowledge required of them is complex, interconnected, and, by its very nature, draws from many areas (Friedman, Friedman and Klein, 1999). Edwards (1999) maintains that "in so many cases, the most provocative and interesting work is done at the intersections

where disciplines meet, or by collaborators blending several seemingly disparate disciplines to attack real problems afresh.”

THE LEARNING ORGANIZATION

Clearly, there are great changes ahead for higher education, but changing the culture of an organization is a daunting task. Forward-thinking institutions have to consider what can be done to make their organizations more responsive to change. In the corporate world, many firms are recognizing that the ability of an organization to learn is the key to survival and growth and *organizational learning* has become the mantra of many companies (Argyris and Schoen, 1996; Senge, 1990).

Organizational learning has been defined in many ways. Stata (1989) asserts that “organizational learning occurs through shared insights, knowledge, and mental models ... [and] builds on past knowledge and experience.” Senge (1990) writes: “learning organizations are not only adaptive, which is to cope, but generative, which is to create.” Pedler, Burgoyne, and Boydell (1991) state: “A learning company is an organization that facilitates the learning of all its members and continually transforms itself.” Garvin (1993) believes that a learning organization is “an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights.”

In general, the learning organization will incorporate many or all of the following attributes and activities:

- Awareness of the external environment. Knowing what the competition is doing.
- Belief that individuals can change their environment. A learning culture.
- Shared vision. One that encourages individuals to take risks.
- Learning from past experience and mistakes — experience is the best teacher.
Learning from the experiences of others in the organization. Organizational memory in order to know what worked in the past and what did not.
- Willingness to experiment and take chances. Tolerance for failure.
- Double-loop or generative learning. With double-loop, as opposed to single-loop, learning, assumptions are questioned. “Double loop learning asks questions not only about objective facts but also about the reasons and motives behind those facts” (Argyris, 1994).
- Concern for people. Respect for employees. Diversity is seen as a plus since it allows for new ideas. Empowerment of employees.
- Infrastructure allowing the free flow of knowledge, ideas, and information. Open lines of communication. Sharing of knowledge, not just information. Team learning where colleagues respect and trust each other. An organization where one employee will compensate for another’s weaknesses, as in a successful sports team.
- Utilization of shared knowledge. Emphasis on cooperation, not turf.
- Commitment to lifelong learning. Constant learning and growth.

- Ability to adapt to changing conditions. Ability to renew, regenerate, and revitalize an organization.

Knowledge sharing is a necessary condition for a learning organization. To foster the sharing of knowledge, computer software has been developed to make it easy for coworkers to share their expertise. For instance, the AskMe Corporation has created a website (<http://www.askme.com/>) to demonstrate the effectiveness of its software. One thing AskMe discovered is that knowledge sharing is difficult in pyramid-shaped organizations with tall organizational structures, *i.e.*, characterized by numerous layers of management. Knowledge sharing works much better where there is a flat organizational structure with a relatively short chain of command. The ability for information to flow in all directions – even from the bottom of the organizational pyramid to the top – means that some managers might feel that they are losing some of the status and authority of their position. After all, it is conceivable that someone in the mailroom might be able to answer a question that stumps top management. Knowledge can be found anywhere and everywhere.

The power of knowledge sharing should not be underestimated. Linux, the extremely successful operating system, was developed by the collaboration of programmers all over the globe.

ARE UNIVERSITIES LEARNING ORGANIZATIONS?

It seems that very few universities would qualify as learning organizations. It is quite ironic that the university – the quintessential teaching organizations – does not know how to learn. Most universities have little knowledge sharing and are notorious for turf battles. Smith (1993) asserts that: “Academic departments serve as organizations that exhibit all the segmentary politics described by anthropologists: segmentation for largely demographic reasons, balanced opposition among themselves, and unitary resistance to a superordinate entity, usually the college or university as a whole.” Harrington (1977) believes that departments encourage loyalty to the discipline rather than to the university. Apparently, most universities are not learning organizations.

Senge (2000) posits that, unless we believe that the future will look exactly like the past, we should be willing to make some of the changes necessary to encourage the evolution of the modern university into a learning organization.

TRANSFORMING THE UNIVERSITY INTO A LEARNING ORGANIZATION

The following are some proposals *vis-a-vis* faculty, students, and the public, that can be used to restructure, maintain, and promote the university as a learning organization. These proposed mechanisms are practical, simple to implement, and low in cost.

RESEARCH

Establish a message board to function as a research matchmaking service. As noted above, the most exciting research is often at the interface of two disciplines. Furthermore, researchers with expertise in one area (e.g., biology) might need to collaborate with a faculty member with expertise in another area (e.g., computer simulation or geology) in order to write a paper. Universities should provide a central message board where faculty members could state the area(s) in which they are doing research and the kind of co-author, if any, they seek. This site could also be used to find ideas for research. Senior faculty members might be willing to provide ideas for research in return for a byline on any resulting article. If successful, this service can be extended to include faculty in other colleges.

Establish an online archive where faculty can post papers for review by colleagues before submitting them to journals. If the faculty at a university work together as a team and want their institution to flourish, they are more likely to provide helpful criticism. The OpenTextProject (www.opentextproject.org) is an international site that allows individuals to post their papers for pre-submission review.

A learning organization cannot last long if members of the organization have no interest in learning. Unfortunately, a significant number of faculty (one number often quoted is 60%) never publish an article after they receive tenure and become associate professors.

Incentives must be put in place to ensure that faculty continue to learn even after being promoted to full professor. This goes for learning new skills, software, methodologies, and

teaching and creating new courses. Lifelong learning is now necessary in many professions including medicine and law. It should also be encouraged in academe.

TEACHING

There should be a website for every course, especially multiple-section courses taught by a number of different faculty. Faculty should submit their best ideas on how to teach the course and their best lectures. This site would then be a resource for students who have difficulties with the course and would also be a resource for faculty teaching the course. Most professors teaching a course have gotten useful ideas from other faculty teaching the same course. For instance, suppose we have a site for elementary statistics. This might be a course taught by ten different faculty. Faculty teaching the course would be encouraged to post material dealing with statistics. This might take the form of syllabi, lectures, interesting examples, humorous ways to illustrate difficult concepts, computer programs to solve statistics problems, solved exercises, etc. One of the authors has a site for his corporate finance class and has heard that students taking the course with other instructors go to the site since it contains dozens of problems with solutions in the area of mathematics of finance.

The corporate world is learning the value of the Web for e-training. The type of website described above can be especially useful to faculty teaching a course for the first time. Rather than learning the best way to teach a course through trial and error, they can go to the website for a particular course and see how colleagues have been teaching it. Many professors do indeed go to the Web to examine syllabi and course material from the same

courses taught at schools all over the country. The problem is that the caliber of student may not be exactly the same. While it is still a good idea to see how a particular course is taught at other colleges, it will often be more useful to examine the materials used by colleagues in the same school.

ACADEMIC PLANNING

University administrators have to realize that the pyramid-shaped organizational structure makes little sense for an academic institution. Information should not only flow from the top to the bottom, i.e., president to provost to dean to chairs to faculty. The biggest impediments to the creation of learning organizations are the twin fears of change and of things that are new. Senior faculty often resist change. Indeed, Kuhn (1970) found a similar phenomenon in the sciences. Kuhn described “normal science,” as where scientists who adhere to the old dominant paradigm resist the adoption of a new paradigm. Kuhn (1970, p. 52) notes that “normal science does not aim at novelties of fact or theory and, when successful, finds none.” Some of the best ideas might originate from junior faculty who often have a new perspective. Universities that want to be innovative have to allow information to flow from the bottom to the top, otherwise they will stagnate. Knowledge-sharing software should be used by administrators to get fresh ideas from all the faculty.

As noted above, many futurists believe that interdisciplinary majors will be vital to the future of universities. Many of the newer programs being developed at colleges all over the country are interdisciplinary. It is often very difficult to get academic departments to create interdisciplinary majors when each department is interested in protecting its own

turf. Learning organizations stress cooperation, not protection of turf, and this might require a new organizational structure not based on departments. Alternatively, department chairs should report to a “super” chair or dean with the responsibility for an entire school. The job of the “super” chair or dean would be to ensure that departments work together to create interdisciplinary programs and focus on what is best for the university as a whole, not just their own department. A discussion group in which faculty members could provide ideas for new programs should be established. Administrators should reward faculty and departments that create successful programs.

STUDENTS

Students have to be part of the knowledge sharing for a university to become a true learning organization. Many faculty members resist providing students with e-mail addresses, and brick-and-mortar office hours of three hours per week are ludicrous in the age of asynchronous communication. How many faculty members today would deal with a bank that was only open from 9 to 3, had no ATM machines, and no online banking? Information about majors should be automated. There should be a website where students can find out about any major, including requirements for the major and opportunities in the field. Sites consisting of FAQs (frequently asked questions) should be provided for students. Expert systems should be used to advise students as to whether they have the necessary prerequisites for a course. When you purchase a book at Amazon.com, the next time you come back you are greeted by name and other books are recommend to you based on your purchase history. Students should also automatically receive recommendations for courses based on their major on registration history.

THE PUBLIC

Knowledge sharing should not be limited to intra-university activities. Knowledge should be shared with the public. A website should be created providing helpful information for the general public. For instance, this site could have links to subjects such as small business management, marketing, personal finance, ESL, etc. Outsiders could learn these subjects online for free.

CONCLUSION

Establishing a paradigm of knowledge sharing and continuous growth through lifelong learning is not easy even, or perhaps, especially in academe. Interestingly, in these very turbulent times, many academicians are complacent and feel that there is no compelling need to make any serious changes. This is definitely a myopic way of thinking. Peter Drucker in an interview noted that: “Thirty years from now the big university campuses will be relics. Universities won’t survive. It’s as large a change as when we first got the printed book” (Lenzner and Johnson, 1997). Duderstadt (1997b) notes that the faculty-centered approach to running a university, i.e., where faculty decide what, how, where and when they will teach, may be obsolete. The Internet and the globalization of education will change that and colleges will have to become student-centered because of the huge increase in competition for students. Transforming colleges into learning organizations will not solve all problems but it is certainly an important first step.

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