

Reengineering Academia A Step Towards Excellence

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Abstract

This is a follow up paper of my last year's paper presented at this forum "Beyond Survival - A Reengineering Case Study in Academia." This paper presents the overall effects of reengineering carried out on SUNY Farmingdale campus. This paper discusses Farmingdale's planned reduction of its enrollment goal to raise admission standards to a level consistent with new baccalaureate programs. As a specialized college, Farmingdale has been challenged to reengineer the traditional concept of the technical college and to restructure itself so as to be a pivotal element in transforming the regional economy to a non-defense, high-technology base. Farmingdale redesigned its academic offerings to create career-oriented programs in those applied sciences and technologies directly related to the needs of restructured regional economy. The paper also discusses core curriculum issues, external supports, initiation of high school outreach programs, initiation of distance education, and other relevant issues.

Introduction

The state of the State University of New York at Farmingdale in 1966 is the result of a five year program of conscious reengineering reassessment and change¹. While Farmingdale is Long Island's oldest public college, as a result of this process, it is also Long Island's youngest college in many ways. In redesigning itself, Farmingdale has taken a fresh look at its responsibilities to its students, its community and to regional industry, as Hammer and Champy defines reengineering as "the fundamental rethinking and radical redesign of business process to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service and speed."²

Academic Excellence, Redesigned Programs and Enrollment Goals

Farmingdale redesigned its academic offerings to create degree programs in those applied sciences and technologies directly related to the needs of restructured regional economy. Each new program was to emphasize the development of practical skills and "hands-on" training in the fields of growing importance to regional business and industry. Long Island enterprises must be competitive in a global marketplace; therefore, Farmingdale's new program were designed, whenever possible, to include a global perspective on technological transfers and the business potential of foreign markets. In developing these programs, the college was not only sensitive to the labor force requirements for Long Island's resurgence, but also to the unmet needs of the students of region. The admission standards were raised for each and every program to attract higher level students. The college was aware that the implementation of this policy would

have a negative effect on enrollment. Farmingdale elected to reduce its enrollment goals by almost a third. This allowed the college to raise overall admission standards to a level consistent with a program of ambitious academic expansion. The college developed a multipronged approach to increase the pool of applicants, including more advertising in a variety of media, greater recruitment efforts, faculty contacts with potential students, and better orientation procedures. The college started building active relationships with secondary school teachers by working with high school educators' associations, and by offering free workshops and seminars for high school educators on high-tech teaching issues.

Industry Connection - External Support

The Technology Transfer and Utilization Center (TTUC) officially opened in 1993. The TTUC serves as a gateway for industry access to the resources of the college. Small to mid-sized companies obtain expert advice on issues related to production technologies, product development or improvement, and enhanced business performance. Senior students, under the supervision of faculty, work on projects to aid such companies. These students have access to the most modern equipment, some housed within TTUC. During the 1993-1994 academic year, a \$2.6 million federal grant funded a regional Center for Work Force Education located within the TTUC complex. The purpose of Center for Work Force Education is to retrain industrial employees as the region's economy restructures. The Center uses various educational technologies, including distance learning. Distance learning enables Long Island companies in New York State, to participate in training sessions in order to improve employee skills and to diversify product productive lives for a global economy. Farmingdale also initiated an Advanced Manufacturing Technology Incubator. The purpose of the Incubator is to assist start-up companies in their critical early days of existence by providing inexpensive space, shared office services and equipment, and scientific and technical assistance from college staff.

High School Outreach

High school partnership programs include seven Long Island districts as well as a number of business organizations. The partnership provides linkages with Brookhaven National Laboratory, the Long Island Forum for Technology (LIFT), and the Long Island Museum for Science and Technology (LIMSAT). The partnership emphasizes mutual exchange of each institution's expertise, programs and resources, in order to provide enriching experiences for the students and staff. Another program, the Liberty Partnership Program (LPP) is a partnership between SUNY Farmingdale and four local school districts; four community-based organizations (Long Island Cares, Cornell Cooperative Extension of Suffolk County, YES Community Counseling Center, and Huntington Youth Bureau); and local businesses. Yet another program, Partners in Education (PIE) serves several students and elementary science teachers from neighborhood school districts. Project SAM (Science and Mathematics) is a SUNY Farmingdale initiative designed to improve the understanding and performance of secondary students in science and mathematics. Project SAM also provides in-service training to participating teachers. The college is also a partner in three Long Island School-To-Work (STW) Consortium and two Tech-Prep initiatives.

Core Curriculum Issues

The college has been addressing this issue for several years through the work of a core curriculum and a General Education Committee which have been delineated a set of specific core/general education competencies expected from the graduates. In 1994 the college-wide Curriculum Committee established a subcommittee to examine the issue of core studies at the college. After reviewing core curricula requirements at several other schools with missions similar to Farmingdale, the Committee developed a model of nine core areas and requested each department to indicate which if any of these areas were addressed in each course offered by their department or through support courses required of their students. A task force was formed in the Fall of 1996 to do a thorough review of the responses received in order to develop a matrix that identifies those courses which may fulfill specific requirements.

Conclusion

Farmingdale is fundamentally a teaching institution, and focuses on the learning process in all programs. The college seeks to serve a diverse student population reflecting an increasingly pluralistic society. Farmingdale is a campus where the technologies are not only taught, but also used in its programs and services. The college seeks to create an environment where there is respect for the humanistic use of technology in professional, technical, and general education courses, and fosters an appreciation of society's technical needs in liberal arts courses.

Bibliography

¹Periodic Review Report - State University of New York at Farmingdale. Submitted to the Commission on Higher Education of the Middle States Association of School and Colleges: May 1996.

²Hammer, Michael, James Champy, Reengineering the Corporation, Harper Business, New York, 1993.

Biography

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