An Action Learning Approach for the Development of Technology Skills

Richard L. Peterson and Joan D. Mahoney
Montclair State University, USA

Information technology provides a unique challenge to universities to maintain the relevance of their offerings as the rate of technical change far outpaces curricular reforms. What is needed for students of information technology are opportunities that provide real world, hands-on experiences for developing necessary skills and understandings in a relatively "safe" environment. This article is a case study of the experiences of students in a course that required them to complete action learning technology projects for social services clients. Results suggest a generalizable model for improving relevance within the universities of the 21st century.

INTRODUCTION

In the world of information technology (IT), generational innovations occur, on average, every eighteen months. To leverage innovations, businesses need to employ individuals who are qualified on current technology and who also can build their store of knowledge of subsequent innovations on this solid base. Experience is one of the key qualifications sought by employers of management information systems (MIS) program graduates. But, universities vacillate between a business orientation that might include hands-on experiences and education in basic disciplines where real project work is limited or non-existent. In the midst of this schizophrenic-like struggle, one finds outdated curricula, outdated faculty, and poor instructional resources (e.g., 486-level CPUs used in the maintenance laboratory).

Previously Published in Challenges of Information Technology Management in the 21st Century edited by Mehdi Khosrow-Pour, Copyright © 2000, Idea Group Publishing.
This chapter appears in the book, Information Technology Education in the New Millennium by Mohammad Dadashzadeh, Al Saber and Sherry Saber.
Copyright © 2002, IRM Press, an imprint of Idea Group Inc.
Could a course be structured to provide this much-needed project experience while maintaining the integrity of the course? This was the question of a course offered in the spring of the 1999 academic year at a mid-sized, four-year, state-funded institution in the metropolitan New York City area.

RATIONALE

Traditional classroom teaching approaches such as case analysis, action research through consultancy, field research and observation, and multimedia methods are often insufficient for providing quality, lasting learning (Raelin, 1997). These approaches cannot be depended upon to provide the challenge, reflective growth opportunities, or understanding of the long-term implications of short-term projects. Action learning is a developmental approach that focuses on experience-based learning. The basic philosophy is that students learn more effectively within the reciprocity of a social situation and while engaged in the solution of real problems (Pedler, 1991; Weinstein, 1995). According to Raelin:

“The action referred to in action learning is not temporal or simulated. Students need to take real positions, make moral judgments, and define them under pressure. Action learning, then, as a form of management education elicits managerial behavior, not student behavior. Students derive knowledge not about management but rather about their own capacities to take action.” (Raelin, 1997: 369)

Action learning views the real world as the appropriate learning arena (Korey & Bogorya, 1985). It has been an effective approach in focused settings such as management development programs (Lawrie, 1989; Margerison, 1988) and is also seen as appropriate in more formal education programs (Lawrie, 1989).

While the typical student at the University works many hours in real-world jobs, few are employed in their MIS discipline and even fewer in decision-making positions. Their opportunities to translate the theories and concepts learned in their academic coursework to business problems are very limited. For these students, action learning might prove to be the bridge between skills demonstrated in the classroom and skills demonstrated on-the-job. Real project experience might also solve the student’s “Catch 22” of needing a job to gain experience and not being able to get a job because of lack of experience. Further, the application of action learning concepts to information technology education seems particularly appropriate as a means of demonstrating to students that the intent of the application of technology is to solve business problems, not to create technical solutions that are in search of a problem.