

Knowledge and Skill Requirements for Entry-Level Information Technology Workers: A Comparison of Industry and Academia

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ABSTRACT

Enrollments in Information Technology (IT)-related academic programs have declined significantly in recent years. Paradoxically, the U.S. Department of Labor predicts that the demand for IT professionals will grow much faster than the average for all occupations through the year 2016. To meet increasing demand, IT-related academic programs must attract more students and produce graduates who possess the technical, interpersonal and organizational knowledge and skills required of entry-level IT workers. The purpose of this study is to determine whether the importance of various skills for entry-level IT workers is perceived differently by faculty in academia than it is by IT managers in industry. The results reported in this paper are based upon a survey of the knowledge and skills required of entry-level IT workers as perceived by 350 IT managers and 78 faculty teaching in IT-related academic programs. Finally, implications of the survey results for faculty teaching in IT-related disciplines and for ongoing IT-related curriculum development, as well as implications for IT managers, are discussed.

Keywords: Information Systems (IS) skills, Information Technology (IT) skills, skill set, knowledge requirements, IS professionals, IT professionals, curriculum development