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Investigating the Impact of Human Factors (Teachers, Managers, Curriculum Developers…) on IT Development Project in Senior High schools

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Abstract

This research is accomplished for the purpose of IT Expansion Plan assessment from the viewpoint of Tehran high school teachers. The questionnaire of researcher is used to assess IT Expansion from the viewpoint of teachers in order to observe and evaluate readiness condition of primary substructure of Information Technology functions and data managing. The statistic population of the research is high school teachers in all Tehran’s 19 areas of education office who are teaching in 1388-1389. Stratified random sampling method is taken. In this manner, geographical regions of Tehran’s education office are divided into four regions (north, south, east and west). And one area is chosen randomly from each regional division and then, two high schools (a boy’s and a girl’s) are chosen randomly by draw a lot from each selected area. And also inferential statistics methods (mono group-t) are used for data analysis. Results show that human factors (teachers, managers, curriculum planners…), economic factors, technologic factors (facilities) and educational factors (purposes, books, contents…) have a great impact on IT Expansion Plan in Tehran’s high schools.

Keywords: IT Expansion Plan, high school teachers, human factors, economic, technologic, educational

Introduction

In modern competitive world, organizations need to knowledge management for their survival Anunimous.2009, March, 2001). It goes without saying that in the 21st century, the issue of knowledge is an indispensable component of all organizations and they will succeed in providing the necessary infrastructures for its implementation and in designing the required framework Choy.2008. Estiv viler, 2000, Jang, 2005)So far, information technology (IT) has been able to have the highest share in knowledge management (Hlari, & Shirmilari, 2009). In fact, all states intend, in spite of financial limitations, to provide citizens with the most comprehensive training. Establishment of an

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institution called Educational Communication and Information Technology Organization in many European countries is an evidence for this claim (Lan 1993, Lay, & Perat, 2007).

The effect of IT on human life might not be felt in any area as much as education, and nowadays, evolution of education as a result of powerful emergence of IT has risen. Using IT, learners will be able to take in a great deal of information in the short time. Research projects reveal that since the advent of IT in the field of education, motivated and creative learners have been attracted by education to a great extent (Norris, & Soloway, 2003). Dissemination of IT in education is feasible through leading the power of IT so that schools turn into dynamic, creative educational institutes and the attitude and ability of everlasting learning will cultivate in students. IT encourages students and gives them some kind of power to learn on their own and also instils high motivation in them toward learning, and helps them nurture the habit of self-learning, which is useful for their lives, within themselves. Ever-increasing expansion of IT in the world raises the necessity for its employment in the country, especially in education (Page, 2002). What seems more important is laying the suitable ground for enhancement of IT (Shoka, 2005) Different social strata especially students should become aware of the positive effects and advantages of IT in the future of country and know that it is the only way for continuity of movement toward an information society. They should also adapt themselves to living conditions (Koray, 1998) Nowadays, teaching basic skills has gone beyond reading, writing, calculating and reasoning, and teaching information and communication technology skills forms the center of many educational systems round the world. Thus, this study, emphasizing factors in growth and development of IT, seeks to provide the necessary conditions for applying of this technology in education (Norris, & Soloway, 2003). Description of the necessity for such a study entitled “Investigating CT Developmental Project in Tehran Senior High Schools” also becomes clear (Jensen, 2008, Kaningham, 2000).

Material and Methodology
Methods employed in this study include description and survey. The statistical population comprises teachers serving in 19 educational districts of Tehran senior high schools in the academic year 2009-2010. The city of Tehran is divided into 19 districts in terms of Department General of Education, and the researcher, due to extensiveness of the population in question, had to divide Tehran into four regions, namely, the north, the sough, the west and the east, and randomly select a region out of these ones. Sampling process was conducted through random stratified method and had such features as the condition of chance versus members of the target society and the condition of independence. Therefore, some samples of this project were predicted from the list of Department of Education (out of districts and schools).

Results
- Human factors (teachers, managers, curriculum developers…) have considerably affect IT development project in senior high schools, and this study is in conformity with the studies carried out by Prensky(2001), Kapel. (2000), Hasselbring, & Williams-Glaser, (2000).

- Economic factors have a significant impact on IT development project in senior high schools. As studies indicate, teaching IT skills to the staff, whether directly or indirectly, leads to an increase in the economic power for companies and states. Teaching this skill to the personnel remarkably saves time and budget, which causes economic growth in an organization (Resta, 2002, February, 2000). Of course there relationships are mutual; in other words, enhancing the IT development project in organizations (both in terms of buying hardware and in terms of supplying the budget for educational course and also other expenses), demands allocation of regular credits; and this shows that in order for IT development project to expand in schools, those responsible should provide schools with enough budget (Rozjoli, 2004, Anunimous, 2009). Technological (equipment) and educational factors (goals, content of textbooks…) have a great impact on IT development project in senior high schools. Given the foregoing findings, it can be concluded that education can be regarded as one of the major centers of IT development project in schools. Evidently, as long as teachers do not receive training in a systematic and applied fashion, implementation of IT development project will be impossible. Designing suitable educational courses and
developing practical textbooks which are easy to understand for teachers can be effective in enhancement of the project.

References


