Examine the consequences of the use of information and communication technology (ICT) in curriculum of girls' smart school in Tehran, 2013-2014

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Abstract: The purpose of this study was to evaluate the consequences of the use of ICT in the curriculum smart girls' high schools in Tehran, according to Klein is nine elements. Combination method was used. Data from qualitative interviews and quantitative data were collected through questionnaires, five-point Likert. The subjects in the quality of professionals, teachers, and students who knew more than other forms of ICT tools. Snowball sampling method and sampling was conducted until data saturation. The population consists of professionals, including teachers in some public universities of Tehran, Tehran's experts twenty of which samples of society. Smart girl students as well as teachers and District 6 of Tehran. The results of the interviews show that the use of ICT in the curriculum smart schools, which are the positive and negative consequences are as follows: Positive consequences: Facilitate the realization of the goals of using ICT tools, the impact on the three areas of cognitive, affective, psychomotor, electronic content to increase the quality of content, and engaging the various methods, the use of different senses, The evaluation of the pencil, paper, electronic evaluation, self-evaluation of students, evaluation of a variety of forms, wide and interesting variety of resources, digitization of resources, enhance the quality of learning deepens learning using multiple resources, diversification of learning activities, Grouping participatory learning process, attention to individual differences in the grouping, cross-grouping. Negative consequences: Teachers in various ways to create resistance against distrust for exams online, allowing more students cheating in exams online. Failure to appear for exams teachers lack sufficient skills online/ student confusion in the selection of the group, eliminating discrimination, non-prescription group, participation in community groups at the international level. The results of the quantitative data are the opinions of experts, teachers and students on the implications of the use of ICT but there is agreement on a set curriculum evaluation.

1. Introduction

Today, the main concern of the education system of a country, the appropriate substrates for the growth and development of intellectual capital and knowledge based information society. To all social groups are able to effectively participate in such a society, need continuous learning, creativity, innovation and active and constructive participation of the community to learn. This will require a redefinition of the role and function of new schools as the most important educational institutions in society (Moayednia, 2007). Sustainable development around the world is rapidly changing the ways of studying and teaching. In fact, a new form of education is needed, because on the one hand and the rise of smart society requires the active engagement of citizens with the institutions and on the other hand the huge potentiality of ICT, learning and models of teaching and learning environments require correction. Traditional schools because of the structure, role, rights and responsibilities of teachers, students and parents fixed and unchanged, and textbooks and teachers from pre-selected activities,

so it is not appropriate for a century and a performance and keep pace with changes have; So in recent years with the use of ICT in the education process learning environments and new models have been developed (Domenico, 2013).

Since you already have the basic thrust of teacher education in the country, on schools, on the use of technology, a new creativity in education and the importance of the abilities of the students, this change is necessary. Schools have a wise and intelligent action necessary undeniable purpose of the implementation of advanced management methods and scientific and technological training and look at the current state of the country's education system, the change in the executive structure and architecture to increase productivity and time management for managers, employees, teachers, students and parents will be students (smart Schools document, 2011).

Problem Statement:

Lives fast and comprehensive change that affects various institutions of social life. Training of social institutions in the interaction, the influence of various aspects of ongoing changes can and it must

affect the changes. The emergence and spread of information and communication technologies should be considered, including changes to various aspects of human life has a broad impact. In the recent times, the rapid growth of ICT on various aspects of life, including cultural, social and economic impact have many. ICT in life can result in the emergence of concepts such as the information society, the information age and knowledge economy noted. ICT affects all aspects of human life, and one of the aspects of education and learning (Ayati, Attaran and Mehr Mohammadi, 2007). More than a decade ago, literacy means having the ability to read and write, but today, it is not because the expansion of the concept of communication, the meaning of literacy in their true form, a skill that enables people of the means of mass communication facilities management. While reading and writing still has not lost its base, in the information society, is an inadequate tool (Hosseinnejad and Mohammadi, 2005). One of the characteristics of the information society, the computer and information technology and infrastructure development basis for the application of information technology. Exclusive information literacy computer literacy (ability to use computer hardware and software), but also means the practical application of computers to search and work with information. Man-made ICT as one of the newest technologies, the ability to collect, organize, store and reflect sound and text in the form of text and numerical data; and the use of computer tools and the use of telecommunication systems attained (Zarei Zavaraki, 2001). Depending on the speed, breadth and depth of the development of information technology, knowledge management and knowingly and intelligently coordinate this could be one of the most important strategies for staff training and an opportunity to rebuild the education system in the country and change the teaching be. The main characteristic features information and communication technologies on the production, dissemination and processing of information, to make available to the public as soon as possible, with a minimum of cost and time (Fallon, Carroll 2004).

The school education system in the country needs to take advantage of information and communication technology, to provide continuous learning and new opportunities to the people to experience the life in the information society, so that the technology not as a tool, but in the form of infrastructure for education and vocational training enabling statutes. Widespread use of ICT in the process of education, pedagogical approaches with the evolution of the global context of the development of smart schools provided. These schools are among the key requirements of knowledge societies are founded and approaches to the development of entrepreneurship skills and knowledge students will follow. In these schools, teaching processes strengthened and integrated interactive environment to improve key skills students are relying on group activities in the era of the knowledge provided. In this way the use of ICT in the school system to create specific types of schools, which is called smart schools. (Moayed Nia, 2007).

Since today to discuss the proposed ICT in our country and is important in this research, the researcher wants to know what technology to Iran as what consequences have followed. However, this outcome may not be exactly the same purpose and goal may not be the result. And whether the side effects of our mind, he has brought unexpected effects or not? Because most schools in the country intelligent project is being implemented at the high school level, high school scholar has chosen. Of course, since it is limited by the investigator to enter the high school boys, high school girls chose. The researcher has chosen to Tehran, the Tehran with regard to the characteristics of the class of immigration, including areas with characteristics of economic, cultural, social, are numerous. This diversity is needed to gain a more comprehensive picture and provide diverse. Also, due to the lack of access to schools other city because of the distance and the time limit researcher has chosen the city of Tehran.

Literature review:

The theme of this study, the research inside and outside the country, which are briefly explained:

Mirsaeedi et al (2012) study entitled "Identification of factors affecting the results of smart schools by looking at the current situation and problems of smart schools". The results showed that in the review of the current status of smart schools, the respondents with 55% confidence level cultural factors in good condition and performance factors and learning, and networking hardware, software and do not have good condition and environmental factors in the digital medium. Farhadianfard et al (2012) study entitled "The relationship between the use of ICT in schools to improve the teaching of intelligent students" did the results of this study suggest that the use of this technology information rise and promote the process of teaching and learning is effective and there is a significant relationship between them. Ahmadi (2011) study entitled "Application of ICT explains the strengths and weaknesses of the origin of the curriculum," did the results of this study are as follows:

- Use of ICT in the curriculum focused on limited objectives and specific results possible.

- Intensive use of ICT in the curriculum to increase the speed of access to the information they are learning.

- Use of ICT in the curriculum focus is to improve students' learning activities.

- Use of ICT in the curriculum will focus on educational content is attractive to students.

- Decentralized use of ICT in the curriculum to adapt the content of the curriculum with educational software applications.

Afzal Khani et al (2011) study entitled "Evaluation of the deployment of smart schools in the province of administrators and teachers". The results show that schools in the areas of school management, integrated computer systems, Teaching-learning environment, infrastructure development, information and communication technology computer integrated with other smart schools require more effort to locate the smart schools in the province, The components of teachers trained in the field of computer technology and integrated management capacity and the potential for schools is smart. Civilian and hydrothermal (2008) study titled "The place and role of ICT in the curriculum of primary school teachers and experts in curriculum and instructional technology in Tehran" did. The results show that ICT can help the objectives and content appropriate to the needs and interests of learners and be prepared to determine the needs of society and everyday life. ICT also enables individual learning, active teaching methods, and types of evaluations, analysis of questions, fixtures, results evaluation and comparison of academic achievement of students in schools to provide. Doost Mohammad (2008) survey entitled "Survey on the Use of ICT in education and publish intelligent electronics in high school in Tehran". Research findings suggest that from the perspective of managers, facilities and infrastructure, access to information and professional upgrading of teachers is largely provided. Teachers' also keen interest in the use of information technology in education and training in the use of information technology greatly increases the academic achievements of the students know. This is where the skills and application of information technology in education are moderate. From the perspective of teachers using IT in education is faced with obstacles, and from the perspective of students, partly to boost learning, skills for using information technology in the learning medium, as well as the students' use of information technology in education teacher's role is somewhat reduced.

Hajforoush et al. (2003) carried on research entitled "The results of the use of information and communication technology in schools in Tehran" did. The results showed that students in the study of innovative activities:

- Students in doing research, translation, and use of educational CDs, Internet and intranet have been very active and spontaneous innovations.

- Work with teachers on the use of information and communication technology innovations and educational initiatives, has changed.

- If in classrooms, field probe for students so that they can freely provide individual or group activities using ICT to investigate issues of interest related to training by their own choice, with the help of his teacher, even in the curriculum, especially in deepening the educational content and a better track of what they are in the formal curriculum, will play an effective role.

Abrahamson (2004) Research conducted as classroom network. The focus of this research was on how to strengthen the network class. The findings showed that the use of technology, teachers could easily perform their educational activities. For example, previous knowledge of students considered their emphasis on understanding the issues increase their motivation, group discussions easier and provide great feedback.

The immediate feedback from students led teachers can adapt teaching methods to the needs of students. Gillian (2001) in his comparative study entitled "The impact of ICT in schools: classroom design and revision of the curriculum" in four countries (United States of America, Britain, Australia and Hong Kong) show that the teachers, technology coordinators in schools , school administrators and education officials seek to create new opportunities for learning using technology. To this end, education and encouraging countries studied incentive strategies for integrating ICT in the curriculum for the program 2 to 5 years are highlighted. Because when you combine information and communication technologies in the learning process, teaching methods and classroom organization cannot remain unchanged. That is why the countries studied in recent years the integration of ICT in the school curriculum have increased dramatically. This technology has a significant impact on redesigning the curriculum in the four countries.

Klements (2000) research on "the duties and exercise the innovative use of computers in teaching mathematics" in the United States of America has done. In this study, the curriculum approach is the integration of information and communication technology. The results showed that the use of new technologies led to the continuous feedback from the students, creating geometric reflective thinking, encouraging independent thought, a link to the whole class while maintaining the individuality, the emphasis on concepts rather than find answers to

questions and supporting the solution. The results suggest that the use of information and communication technology to improve student learning in mathematics lessons in geometry, technical drawing, programming language and development of knowledge-based collaborative group work is done.

Methods:

This study is due to a combination of research methods in the class. In exploratory research projects, data quality is more important. The sequence data are collected primarily qualitative data and quantitative data. In this study, researchers based on the results of theoretical studies and analysis of data from the interview questionnaire construction and through the collection of quantitative data.

Research community and statistical population:

The study population consisted of professionals and experts in the quality of schools that were smart enough to know**.** It also includes smart girls high school teachers towards ICT tools and more knowledge of other teachers used ICT tools and female high school students in Tehran intelligent than other students were a feature of the use and knowledge of ICT tools. The population of a small stage consists of experts, including professors at public universities in Tehran and experts, including experts (ICT in smart schools) education and education of persons who are twenty regions. Community, including students and teachers of high school students in a smart little girls in Tehran.

Data collection tools:

The quality with regard to the purpose of this study was to achieve real experiences and views of experts, teachers and students on the topic of the interview subjects as the best tool for achieving the goal of researchers in this study. The present study was conducted semi-structured interview form. In the quantitative data were collected through questionnaires. The research is based on findings from the analysis of qualitative data and information gathered through literature review and theoretical study, 5 degree Likert scale questionnaire response packet provided. The selection questionnaire and evaluate the agreement extended to experts, specialists, teachers and school children about the consequences of ICT was smart.

How to analyze the data:

The qualitative researcher, to analyze data from interviews of categorization and coding techniques used. The categorization of the data and to extract the encoded results. The quantitative research, data analysis the descriptive statistics (frequency, frequency, mean and standard deviation) and then inferential statistics chi-square test (to determine the amount of the difference) was used.

Conclusion:

Enter to new information technologies in the field of human activities and increasing the current century, the perfect opportunity to change the face of education professionals and to improve teaching and learning excellence of the educational objectives of quick access to different data storage and processed data to properly use it. Login ICT in education is an opportunity for reform and educational innovation resulting in increased efficiency and effectiveness of the education system. Many developing countries and the developed world the opportunity to make fundamental changes in their educational systems continue to progress. For the development of technology in education should be a lot of effort, otherwise we will be back in the future world developments and education is the backwardness of the backward society to follow.

Along with the information age and the rear of the caravan nonsurvival of science and technology requires a combination of technology and information and communication technology is a human. Today, science and technology has been a part of human life. Technology and technology makes it possible that man could target better, faster and more efficiently fulfill. The use of technology in the teaching process - learning is very useful the point that is worth noting is that these technologies should be used in combination with traditional methods and as the methods used in the compilation of a method to be used.

Today, in the era of information and communications accelerated the most important factor of life and society and the progress of nations, their educational development. The development, one of the important components of the software and the condition is the survival of a society. And sustainable development based on knowledge and research is any capability is achieved. This is necessary and the need, on the one hand, mobility is education, which is due to the development and promotion of the culture of the community and the country's scientific and educational requirements.

In order to move from a traditional school to school, smart, structural change and technology is necessary, which may include changes in school structure, training needs and legal contexts. In addition to the changes in school structure, training needs and legal contexts are important. In addition to the students' thinking and knowledge in practical and effective solutions in order to adapt and take advantage of the new dynamic environment was considered. On the other hand the use of information technology in the learning process as the media, should learn the foundation and structure change and

this only in direct contact with the teacher and student roles and structural changes in educational content possible.

Education institutions are expected to re-create the culture and values of the transition to next-generation backup, the source of social innovation changes.

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6/3/2015