Study the Establishment of Smart Schools

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Abstract— **This paper describes the structure of the smart school. This paper described design a smart school a parts its different.**

Keyword— computer; establishment; schools; smart schools; information technology

I. INTRODUCTION

Common education at country's schools is a traditional education. In other words, it is just listening. The new method will be tried to presented education with training films, animation, and etc. In this way, stability of subjects is more than traditional way. Also in the method, scientific subjects can be transmitted in a more attractive environment and less time.

In traditional schools, lesson plan of teacher includes a set of guidelines, curricula, training additional questions, exams and class ... Be. But in addition to these new schools, teacher of multimedia educational materials including video, photos, audio, slide and ... Uses the quality and shelf life to promote education. That is the first step on the way toward smart schools. Of course, if we imagine New information technology (in its different aspects: Internet, computers, multimedia and ...) makes the educational revolution lonely, because if the training-learning culture in the educational system does not transform, New information technologies will not only bring changes, but to strengthen the conservative traditions will lead the training. Therefore, traditional schools moving toward smart school requires a change in the country's educational system and never smart schools will not be possible unless the structure of education system be changed. This requires long term planning. This change should be step by step and with tact and thought [1].

The most important features and characteristics of smart schools:

A) In smart Schools, teachers can design new courses according to the needs and interests of students with using of databases and software programs, etc or modify and improve existing courses .So the educational content of courses in these schools will be different from other schools.

B) Students of schools determine their own learning rate. Also in these schools, hours learning are not limited to school hours and when students will their favorite classes, they will be provided through computer applications or telecommunications in every time.

C) The role of teachers in these schools, will be changed largely from the practicum students to pursue their private education and therefore they will find more leisure and opportunity for their professional growth and development (reading, communication and constructive interaction and effectively with colleagues, promote and improve science teaching skills and ...).

D) In these schools, students often present in the classroom rather than large bags full of books with computers (lab top). In other words, in addition to current teaching materials and textbooks, in these schools, various software and multimedia software courses such as CD and ... Shall be used [2].

E) In these schools, Evaluation of students is done every day and continuously, rather than in indented sections shifts (at the end of each chapter or each term and ...), and also some of these tests are done online and remote.

F) In these schools, when students enter and exit the school, with digital cards that they own them, their parents are made known of enter/exit times (SMS sending through school automation system). Parents can connect to the school evaluation system with a simply training and take information about status of self-child's academic and gain knowledge progress. In These school, an E-Mail usually will be sent to parents at the end of class hours from the school for them to inform of children state in that day.

G) Since some of the traditional activities in other schools are decreased by information technology in these schools, but quality and quantity of interactions between students, teachers and parents will promote and because of result from interactions of these three groups, Possibility of creating better learning conditions for students is provided [3].

I) Information technology is the exploitation technique of human ideas that concedes known, repetitive and non-creative works to machine through automated operations and makes free the human thoughts toward the unknown revelation. Peter Drucker said "handwork give its place to knowledge work, but determinant role of humans will continue and establish as the organization dominant".

So using of these technologies is only as a tool for achieving the goal of education and more efficient training and appropriate with incremental changes in the world.

The most important reasons of establishing Smart schools:

A) Nowadays, due to the growth of computer technology, speed of data transfer and explosive of knowledge, information and knowledge can be available to everyone easily and quickly. In such circumstances, using of information and informatics technologies in smart schools provides the updating scientific information and enhancing teaching skills of teachers so that they can estimate more accurate of students' conventional knowledge using of available tools in these schools and according to students' conventional knowledge, they coordinate training courses and

materials of courses with conventional knowledge of their students [4].

B) In the other hand, educational programs in traditional schools are mostly based on teacher and are not appropriate with talents, abilities, needs and learning styles of students that each of them has its own rhythm. Smart schools can be useful and effective in order to eliminate or reduce this educational gap due to the flexible curriculum, the possibility of teaching new techniques, having a wide range of programs and teaching methods and giving importance to student role (with considering Individual differences and more attention to their needs and interests and talents). In fact each student can be trained depending on his/her talent and in other words, education system is variable to students' potential.

C) The future information society requires people that are able to use information technology for growth and development. In this age, remain deprived of day knowledge, insight and skills leads to unemployment, social inequalities and thus the emergence of dissatisfaction and stress. Smart schools are planned mainly to supply these needs because in these schools students learn how extract their need information through information networks, how think about them and how use their findings in order to solve self problems and development of their communities [5].

The existing barriers in smart schools' development way:

– It disarranges the existing order and has concerns with itself. It provokes a negative kind of opposition and resistance in humans. (Especially concerns are introduced such as the possibility of failing students in the school entrance, and possibility emotional problems and Heart scurry in students to a new school system and education methods, etc.)

- Inadequate skilled and trained manpower.

- Lack of financial and physical resources to equip smart schools.

- Lack of proper vision of information technology among the people and officials, especially teachers and administrators and the education and ability to apply the tools and resources, environmental conditions and public opinion understanding of this phenomenon is more important than all [6].

- Thought to jeopardize job security of teachers with innovations

- Economic problems of many families to provide at least one computer system

- Lack of true cultural beliefs of our society, especially parents of students about smart schools

The process of creating change and achieving to smart schools:

- At first we must have the deep understanding and thought of these schools [7].

– we must begin from universities and teacher training centers, managers and all education personnel. These people should learn how as students in educational environments to learn and grow, and try to flourish in the chase to the unique talents of students, have professionals interaction and cooperation tend, pay to assess their performance, have an active presence in determining Educational Policy and be able,

to create a dynamic environment in the area of education that changes with changing educational needs of society [8].

- A serious transformation in training materials must be done, and educational materials suppliers should be responsible for this work. Best ways of thinking with course topics should be blended and also the structure and relationship between different topics to be determined accurately [9].

- Perform activities that students have incentive and facilities to do them and normally they will lead to optimal learning. Therefore, educational materials for the students to learn well and what they learned to take properly, you must create the appropriate models, promotion of thinking and create motivate in students, a bridge shall establish between what they have learned and the new position.

- School and learning environment with the efficient using of existing technologies to provide and strengthen the above methods, try to upgrade imagination of student to their abilities and capabilities [10].

- Evaluating is a tool in the best position to reflect students' learned and it must create a dynamic environment in which student can be apply his/her findings and learned in solving problems that are new, but they are according to his/her skills, or They are dealing with them in everyday life or interested in -solving them. In such an environment student has the greatest sense of responsibility to quality of learning and doing things.

- Evaluation is usually focused and is done just with clear and precise criterions without qualitative and quantitative comparison of students works and in addition to teachers, it is available for the students also. However, it is necessary to evaluate the performance of teachers [11].

II. CONCLUSION

Mr. David Perkins, one of the smart school designers, said that the smart school has two basic ideas:

1. Learning is result of thinking and all students can learn to think properly.
2. Active and appropriate use of knowledge, will lead to deep understanding and learning should be included deep understanding.

Most important characteristics of today are the growing developments in momentum of scientific, technological, social and... . When only stable phenomenon is change and instability, the of human communities and organizations are inevitable of access to new trends for survival , dynamic and creating constructive developments in the future, because according to Toffler said "Only with innovative using of change is for its conductivity changes that we can be spared future shock damage to a better future and achieve humane. On the other hand, in all societies ,the education institutions are expected to be the head is the source of social changes and innovations in addition to recreate in culture and transmission to the next generation , because the education system creates major infrastructure of personalities and social perspectives based on its mission, an then if it does a conventional collaborative effort , expected innovation would be easier in the community. This means that education system should also

be able to coordinate their development towards modern society and predict the future changes, in order to lead changes to create favorable developments in the future.

In this regard, one of the approaches that can be helpful in responding to these needs in the educational systems and today in many developed countries implemented or are being implemented, the expanded using of ICT in education systems and consequently the establishment and development of smart schools. actually These schools was excluded invention from a kind of philosophy and new concept of education, that they try applying information technology ,with Elimination a series of traditional deterrence, to present training. Effective education in such schools requires that students get new roles in learning, therefore that is information seekers and are able to arbitrate and evaluate the value of the extensive data on the internet that they are available for using. In such circumstances, the role of teachers is changed as well as transfer knowledge and information to facilitate the learning process. They should also work in such a way that students can take self-confidence, information management strategies and necessary skills to achieve negation in order to everyday life and they be able to use them in their working environment and technological tools of mass communication successfully.

As was mentioned, like any other educational innovation in the education system, there are obstacles to the establishment and development of these schools, that the major of them are cultural and structural problems. in the last 50 years, Many changes has happened in human life, if you look around your life , you see those, but unfortunately classrooms has not changed than 50 years ago and training is done with Blackboard. If the officials and the administrators, teachers and people do not accept that this traditional style replications is completed ,then they will never accept the new methods, because infrastructure "change" and "change by" is readiness and interest to accept it, otherwise change does not happen necessarily and does not have predicted results and always associated with resistance and defensive of individuals. we should scrutinize Another important point in this regard . it is that we should know technology is a tool and efficient application of any technology kinds comes from thought, culture and social relations deeply. Therefore, we require improved approaches, review educational policies, reorganize the content, improve human resources, effective curriculum design and development of cultural criteria to provide coexistence with the new technology for Effective and efficient utilization of information technology, particularly in developing education.

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