Psychological Security in Intelligent Learning Environments

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ABSTRACT

The use of modern educational technologies are located for teaching science in schools, vocational and higher education institutions, as a matter of principle, the agenda of the relevant organs in all developed countries. Due to the rapid growth of educational technology at present, the future information society places, we need to be innovative information technology, in the development process of applied sciences. In our country, in recent years, has tried to equipping schools with modern teaching facilities, steps to be taken the advantage of new technologies and training, these schools are known as smart schools in the country. But the question that comes to mind in this regard is: "Is it smart school building, equipping schools with an old soul and realized the last decade?" Or use of this equipment requires the space that intelligently designed in tune with modern educational technology? ". Given the lack of research that led to the general conclusion concerning the form of the building, spatial relationships, and how new technologies in the design of smart schools, such studies seem necessary. The results suggest that a Smart School, in addition to the use of technology and modern technology, the building must have the factors such as intelligent design and installation of electrical and intelligent systems, the use of lighting, color processing and general psychological security, the design of the building will be very effective.

INTRODUCTION

Word dictionary meaning is the conservatory high school where students learn a variety of art. In the dictionary, the word intelligent concepts such as the intelligent, wise and buy with [1]. Smart school educational organization with a physical presence and real (not virtual) where students are trained in a new form, The Smart School, control and management, and network and computer-based technology, the content of the electronic modules and systems for monitoring and evaluation is intelligent [2]. Smart schools, computers in the teaching and assessment of the impacts and curricula have changed somewhat. But the social functions of schools still exists, because it can help students in social relations. Smart school students learn a host of information processing and use this information to learn more [3]. But technology alone is not able to create a meaningful learning environment, various technologies are integrated and aligned unless education [4]. The distinction between e-learning and traditional learning in some respects, may be traditional e-learning courses to become an effective and successful, effort and aspire complex requires a proper planning and control, and this plan requires analysis of the current and previous e-learning programs (Table 1 and 2).

Statement of the Problem:

The use of modern educational technology to teach science in schools, vocational and higher education institutions, as a matter of principle, on the agenda of the relevant organs in all developed countries have been developed. In our country, it is only equipped with the previous traditional schools the most basic educational opportunities made possible by smart but with the rapid growth of educational technology at present, future information society is in need of places where IT can be as creative, in the development process of applied sciences. The answer to this question is to study of "Is it smart for school, equip schools with an old soul and realized the last decade? Or use of this equipment is required spaces, intelligent design and in tune with modern educational technology? ".

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Table 1: Diagram of the process of teaching, learning and intellectual creativity [5].

![Diagram of the process of teaching, learning and intellectual creativity]

Table 2: Evolution of e-learning.

<table>
<thead>
<tr>
<th>E learning in the past</th>
<th>E learning Currently</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any method that replaces the same time, the setting of the traditional face-to-face classes (in correspondence): distance learning, multimedia</td>
<td>The latest evolution of distance learning using network technology to create, develop, deliver and facilitate learning deals.</td>
<td></td>
</tr>
<tr>
<td>Focus on Education: Lessons based learning model where students are passive; A series of lectures to effectively transfer knowledge from teacher to student</td>
<td>Focus on learning: learner-centered Cognitive information processing, constructive learning; Individual differences in learning: learning as a social process</td>
<td>Trial samples</td>
</tr>
<tr>
<td>The lack of direct interaction between teacher and student; Non-simultaneous interaction</td>
<td>Interaction between teacher and students and among students; Interactions at the same time, non-real-time and at a time (e.g. chat sessions, instant messaging, video conferencing)</td>
<td>Interaction</td>
</tr>
<tr>
<td>Printed or written materials, media, computer tapes independently CAI / CBT video and audio, telephone,</td>
<td>All electronic media, especially network technology such as the Internet, intranets and external</td>
<td></td>
</tr>
</tbody>
</table>

3-Importance and urgency of the issue:

Today, with the development of computer technology, speed transfer of information and knowledge explosion problem, information and knowledge available to everyone at ease and speed can be longer, and the college is not only a framework that student wishes to knowledge, skills and values students on the move, but the economic, social, cultural and media context in shaping concept for the students to have a decisive role. It is also important with regard to the training of the new education of future generations and a lack of research that led to a fruitful conclusion in this area, such studies would seem essential.

The purpose of the study:
- Scientific objectives:
  The purpose of this study was to investigate the Smart Schools Fundamental studies in different parts of the world and to achieve the functional design and compatible with existing technologies for intelligent learning environments in Iran.

- Practical purposes:
  Due to the various methods of teaching intelligent than other methods, intelligent learning environments must be different than any other educational medium, also according to that same approach to the issue of intelligent building, smart appearance and body of training building should represent a technological and smart infrastructure.

- Social objectives:
  An intelligent learning environment fit the new educational technologies in a society, in addition, the population is familiar with the technology in the world to accelerate the training and evaluation of the various sciences.

Research Questions:
- What effect can have the psychological security in intelligent design schools?
- An intelligent learning environment in which students can have an effect on the process of learning the art?
- What are the properties of architectural distinction between a smart educational building and a traditional school building?
Methodology:

The applicability of this research was used in combination of several research. Firstly, the method of historical interpretation is that first of all resources, documents and information subject identification and collection and then paid to review and interpret the information. Secondly, the study is documented. In this method usually involves interviews, find and review new evidence or documents in the form of maps, photographs, slides and films were accompanied at the time of analysis and the integration of information and research data will be used.

Background of research:

Table 3: Some studies by writers on the educational facilities in different time sequences.

<table>
<thead>
<tr>
<th>Conclusion</th>
<th>Source</th>
<th>Title</th>
<th>Authors</th>
<th>Year</th>
</tr>
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<tbody>
<tr>
<td>Use of information technology in the learning process as a medium, you must learn to change the foundation and structure. It is only in direct contact with the educational process as a medium, you must learn to change the foundation and structure. Moral changes in educational content are possible.</td>
<td>Journal of Educational Innovations, No. 27, Vol. VII, p. 62</td>
<td>Smart schools in the country's development challenges</td>
<td>Mahmoudi, J., Nachilgar, S., Ebrahimi, B., Saleghi Moghadam, MR.</td>
<td>1387</td>
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<tr>
<td>The results of this study indicate that: As can be lasting and valuable modern architecture. I love the process of convergence in the field of architecture. If today mellow and efficiently implemented, and thus, according to the need of each member does all the above features to be integrated.</td>
<td>Journal of Technology and Education, Vol. II, vol. 2, p. 277</td>
<td>Convergence of technical training courses in architecture</td>
<td>Bagheri, SH., Taher Toloudeh, MS.</td>
<td>1387</td>
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<tr>
<td>Check back yard of schools in the world, especially developing countries showed inattention to landscaping. These spaces and their role in promoting educational activities and Learning in young children.</td>
<td>Armanshahr, No. 2, Summer 1388, p. 59</td>
<td>An overview of the theories and schools of landscape architecture back yard</td>
<td>Faizi, M., Razaghi asl, S.</td>
<td>1388</td>
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<tr>
<td>The results show that the gaps between the architecture is based on the theoretical and practical training. It would be possible to deepen and enhance the architectural education strategies considered.</td>
<td>Journal of Technology Education, Third Year, Volume 3, No. 4, pp. 323</td>
<td>Experience in architectural design education in schools</td>
<td>Alalhesabi, M., Norouzian, S.</td>
<td>1388</td>
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<tr>
<td>In this study, the lack of program, the lack of consistency in approaches and forgotten values as the main reasons for not achieving good architecture is seen as the future of architecture schools.</td>
<td>Journal of Technology Education, Vol. IV, Volume 4, Number 3, pp. 223</td>
<td>Architectural education today and future challenges</td>
<td>Gorji MAhlabani, Y.</td>
<td>1388</td>
</tr>
<tr>
<td>The amount of information is more intuitive and better promise we'll have a better visual comparison of the design process, we passed a plan to achieve creative inspiration come on stage.</td>
<td>Journal of Technology Education, Vol. III, Vol. 3, No. 2, pp. 153</td>
<td>Visual analogy and its place in education Creative Design</td>
<td>Khazand, M., Mozafar, F., Faizi, M., Azimi, M.</td>
<td>1388</td>
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</table>

Review to world school's history:

The formation of public school education was starting. The reformation was in the 16th century, when the Education Act was passed. Most of the schools were in the two-stories through the doorway into the classroom, respectively. The exterior of the buildings were built very simple. Like other buildings, the architecture of the school building was constructed. So that in the 19th century, schools were designed as stories. Even in the late 19th century, the majority of people were deprived of formal education. The primary purpose of education, especially primary education, Training students to master the basics of reading, writing and numeracy and morally, people with personality, honest, hard-working and homeland was fashioned. Method over the period in such a way that According to which each school is divided into several classes and a group of students in each class were trained. Classroom, where it was at this time it was the teacher's voice fell silent and orderly. The school is not unlike the soldier home. Construction of a pedestrian area and the rigid it was not a trace of the child's life. View of the buildings with the inhuman scale often pose the usually the main points made in the form of memorial [6].

Short history of developments in education in Iran:

History of education in general has been the development of two types:
1-evolution.
2. The fundamental evolution.

The evolution of the notion has been improving the educational system and its elements (Including educational content, teaching methods and teaching organization) so that the whole system is more or less similar to the preservation and continuation of the previous period. Unlike the radical transformation of what is true in the current educational system in general has changed and a new foundation on which it sits. The impact of this change on the physical environment, education likewise is twofold: "The development of education" and "education space have changed." Teaching evolution always depends on the political situation is favorable, while the transformation of the education system has always been due to the changes in society. In other words, change attitudes and cultural beliefs of the people who incidentally always have been made in the wake of the political crisis, the destruction of infrastructure and the emergence of popular education and the new meaning ascribed to it.

**Impact on the education goals of educational facilities:**

Each of the principles and specific goals are predicted for their education environments. For example, it is recommended that the school should be a healthy, informed, thoughtful, creative and competent develop that are desired to form the cornerstone of society provide the economic development and social development. If the educational system define "creativity" as the basis for the development, it is necessary to exercise the creativity of a child. The use of "creative" open space and architectural style is necessary to support and gentle as a training method. Traditional spaces with fixed benches and ... children so that experts describe the behavioral sciences will lead to citizenship no creativity and punishment, fear of mistakes in raising children innovation is necessary to prevent them from venturing; so the thought, the innate desire of the child's curiosity, exploration and discovery, and insisted tries all the features of the physical environment is distorted for the child's mind. The difference between the new school and the classical school of features that Mobility for the child or he takes the sedentary. Is this the only difference in the type or types of facilities to other facilities? What would be the purpose of possibilities?

New video about the teaching and learning process: a new approach to learning, rather than injection and transfer the contents of the child is in search of a loan. The modern schools over the place unidirectional teacher lectures, the focus of social mobility of students and encouraging environment for the self-esteem and self-perception of them.

Special attention to the cultivation of mental and personality characteristics of the student: Get modern, classic school body that allows social interaction with other students and they denied the presence of the teacher, knows the one-dimensional environment and lacks the necessary competence of talents, mental and spiritual development of the child. Modern school experience shows that the school should be familiar with the psyche of the child; that should ensure a space of their own. Characteristics of a learning environment include:

- Create an environment where the child is in scale.
- Variety of factors and training methods (see concrete and tangible experience).
- Training takes place thanks to the collaboration.
- As the end result is worth the research and nurtures the spirit of investigation in children.
- Due to the size of the training aspects of child rearing her growth and development of individual personality and social mind him. As a result, it is not a one-dimensional environments for children.

Tips to design a learning environment that must be addressed include:

1. Create a framework for a variety of educational activities, the result should be responsive to changes in patterns of educational space, furniture and educational equipment.
2. Involving children in designing their environment.
3. In view of the mentality and cultural background and training of teachers and students

Tissue learning environment is a set of physical activity and the activity of human subjectivity, so the most important body training, flexibility, it is appropriate to change the activity [6].

**Smart school:**

Smart school educational organization are with a physical presence and real (not virtual) where students are trained in a new form. The Smart School Management have been done based on computer technology and network, and the content of the electronic modules and systems for evaluation and it is intelligent monitoring [2]. To create this type of schools, we have the long-term plans to be considered. For example, today is a smart school, may be a long time (even more than 10 years) take up their instruments, which includes communications infrastructure, appropriate content, training of teachers, parental education and culture change is complete. Of this type of schools, both in terms of the physical layout of the chairs, classes and both the architecture and the building is different, the space should be created so that the students can easily have the laboratory course on the table. This makes training each student's desired content in both theory and practical understanding and know that if you encounter problems in the future, access to information sources in order to fix a problem [7].
The role of the physical environment on the dynamics of modern education:

The teacher can also be effective in adverse conditions, but there is no doubt that the quality of teaching is good teaching space and equipment that is not very effective. Student diversity, lack of desks and chairs, poor quality gypsum board, not enough light classes and Dark Yard, with windows overlooking the street and the like can help the teacher in the educational process and make teaching methods. So he can help the healthy way, students will increase work efficiency. They even accelerate spiritual growth. Teachers should give students opportunities to your knowledge, and to gain knowledge production. Students need to experience the direct method, more than the direct learning opportunities. So it is better for teachers to teach and convey real and possible providing and arranging learning materials for learning to take a favorable position [9].

Professor Ahmad Safi, in the field of education experts, said “this is the physical expression of the close relationship of school and student learning notes and says we have the architects in psychology, education and learning how to understand as possible”. It should be composed of psychologists and education experts, consultants, technologists and educational planners and architects come together to build the school. Look at this new change in construction and architecture schools in the next school, it also makes possible for the education system. [10]. Unfortunately, in a significant amount of school buildings have been damaged due to various reasons and bracing environment for learning and knowledge have little relevance. In these schools the physical environment of the school and school spirit Fatigue, lack of discipline and focus the students, achieve the objectives of education and training programs are faced with a serious problem. “The educational messages and the hardness and growth will be slow and Enthusiasm and willingness to learn will minimize the students.”[11].

Education in most countries and especially in our country since the early years against the spirit of inquiry and A powerful enemy curious and explore the child's soul. The whole system of education is not in the child's upbringing, but rather to inform him of the outcome of research has attempted to others. The quality of the educational programs of the Current returns to the physical environment of the school. Environmental education in schools existing in nature, based on classical principles, Information and knowledge are injected into the minds of children, created and No way to search and discover new content has been designed and So from an early age the mind so uninterested in the study period. The laziness of the mind itself as a lack of interest in older age to research and develop it. Suppose we have two schools' understanding requires not only hear and learn to maintain “is product built. On the basis of the work environment, training and therefore less rearing it finds a way. During the speech teacher training is organized by textbook [6].

To achieve such a situation, the teacher decision was in practice and students to be seated are seated in the class and to be seated to make a way. In the process of speaking and listening are mainly two seasons and joins so the search and discovery of the concept of observation and experience was out of order tools and resources that are not found in the class. In addition to other non-classroom school spaces such as hallways, courtyards and ... no clean and appropriate spaces are there for the child's psyche. In recent decades, the modern education environment, primary education system in some developed countries, transforming and the main objective will be pursued.

- First, the child must be protected and as much more than a repository of information and a mechanism probe scanner and grow.
- Second, aspects of child rearing should be given to him after training In addition to the growth of the mind, personality and social development also considered. This discussion is born a new pedagogical thinking Children are inherently willing and eager to learn, but who knows. What is this desire to strengthen and maintain order and Or vice versa, it suppresses and even save it stimulates learning, surely the learning environment.

According to modern ideas of psychology, mind seeker children naturally and without the use of external factors such as discipline and encouragement is willing to explore and discover. Soul of the child based on these findings, the accumulated mass of questions and uncertainties tirelessly lead to the research and learning. Thus a progressive learning environment, your child has taken responsibility for their learning and tries to help with the children and with the guidance of teachers to research, experimentation, learning, and innovation to create them. The same phenomenon is seen today as a learning environment "student-centered" and the child is known by the entire environment with all kinds of facilities, not only by a person trained to be a teacher.

The first feature of this environment is a variety of factors that may have extensive training and hiring tools and technologies to provide training. A lot of knowledge and experience within the concrete and objective observation, description and hear better and more lasting perception.

The second feature is that the environment in which education is seen as a collective and collaborative effort can be done to help. In this case, during learning, social character and his grown children also prepared to participate in social activities makes.

The third characteristic of this environment is that as the final result of the investigation and the exploration and analysis to answer a question in the mental development of children known to be effective.

Physically the most important thing in such educational facilities, teachers and students look down the line and create space for people to connect with each other. For this purpose, neat rows of students to teacher is gone.
and certainly contrary to the spirit of the child known linear rows. In this environment, education and training needs of their response, and sometimes it is necessary to close and with the child’s teacher’s guide. Research, experimentation, discovery and innovation in this environment is the main objective of education. Psychologically a dynamic and creative learning environment that is attractive and full of joy’s soul and sense of space he is compatible. Learning environment for children not to join the adult entertainment but as a mental and spiritual, Environment that lacks the active force of emotion and perception of the child cannot grow his creative force probe [6].

Neurology of Smart School Stamina:

Research conducted by neuroscientists around the world, beginning with the creation of understanding and awareness of the impact of school quality on students’ learning experience. Schools to understand how children react to the properties of the brain and mind space conducive to raising the level of their learning. Such research is understanding the architecture of our knowledge about how to influence the lighting, acoustics, air quality and natural scenery adds to the cognitive process. Physics and School nerve study of brain and mind, a field that is growing fast. Membership Neurology 7,000 a decade ago to more than 37,000 people in the 2006’s. Almost all schools have a building or facility Neurology that most of them are located in universities or colleges of architecture. In the future, more efforts to bridge the gap between neuroscience and architecture will be intellectual. Academy of Neurology Academy of Architecture in 2003 to help bridge the two disciplines and among them was established. In February 2005, the Academy of Neuroscience for Architecture Workshop in San Diego architects, educators and neuroscientists school has established a concept that is common among them to search and understand the. The main reason for this workshop was that brain growth between 5 years and 12 years and important and every year is different from the previous year. How to change the cognitive capacities of age for psychologists and cognitive neuroscience is complex and ambiguous.

Phonic good acoustics: speaking and listening training centers are often the main form of communication. The noise level and reverberation time learning spaces should be such that what teachers, students and others is understandable. Unfortunately, many educational spaces with noise (unwanted sound inside or outside the classroom) and echo are additional.

Good speech with visual comfort and understanding, good visual function in close and direct relationship with educational performance is especially good speech Regardless them.

Problems with light, adjust the level of vigilance and attention: Research shows that the brightness of the entire modern classroom is different from each other. Lack of integrity and discipline in the school environment more conducive to the poor performance of students in the specific tasks and subjects, These non-visual responses and induce strong effects on the physiology of the brain melatonin suppression when moving the clock and leaves.

To perceive color in addition to the emotional characteristics, factors that have an impact on the perception of color, age, mood and mental health is an observer. Children who share distinct personal attributes, often understand their priorities and the color also is common. For example, very young children learn to recognize colors usually tend toward red or orange. Studies show that certain colors, therapeutic effects on their physical and mental disabilities and disability [8].

Psychological security in intelligent learning environments:

Centers and educational facilities designed for the education and training are very sensitive with mental and psychological debate, and highlights this notice to the non-material factors and seemingly unimportant sensitive and after training in the areas of need, first and foremost, recognition of deep and spiritual needs of the people who designed the architecture to be at hand. For example, age and type of concepts and the sciences designed to be taught in the context of the profound influence or the colors that are used in space has a direct impact on the quality of education and other factors such as the area of architecture school. Students of class, gender, students and many other factors Impact on the design of educational spaces that special attention should be given to them.

Conclusion:

In line with the gradual move from a traditional school to school, smart, Structural and technological changes are necessary; this includes changes in the structure of the school, training needs and legal contexts. In addition to the terms of thinking and knowledge of the students in order Practical solutions and optimal use of their new dynamic environment, One of the most influential in improving the visual quality of intelligent learning environments, according to the principles of good design space coordinate their use of these spaces is, because otherwise it will become the most important factors in creating a visual disturbance. As mentioned in the study, color as a factor affecting student learning process more effective. How can the use of color in education and training, along with other factors, significant effects provided that the students make intelligent and coordinated with intelligent learning environments Used. Appropriate color, in addition to beauty and
charm; the pervasive influence of personality and mental health. In addition to the above, it should be noted that contrary to popular belief; The purpose of an intelligent learning environment, not only in the construction of
The latest educational technologies used we should put a number of factors such as color, lighting, lighting, Sound and adequate ventilation along with educational technology, an intelligent environment Above the psychological security and comfort.

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