Designing Exceptional Talents center for children based on creating a sense of belonging to nature approach

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Abstract
Development, progress and recession of a society depend on of the elites of the society. The requirement of a society’s development is the elites and innovators who find and resolve problems in the nearest and easiest way. This issue depends on directing today’s children, recognizing their talents and the proper use of their tremendous powers. To get out of existing difficulties, directing the raw talents, organizing and regarding the power of creativity, innovation and creativity are essential. Most children are born creative; however, creativity can be achieved through learning issues and applying guidelines. Therefore, in the field of children's creativity, a set of tasks including identification of creativity, allowing children, creative playing and etc. are the parents and trainers’ responsibilities. Due to lack of such a center in Iran, it was decided to conduct researches in this field. The main objective of the current study is to increase the sense of belonging to nature in children with exceptional talents in order to increase the ability to learn and lessen artificial environments in learning and teaching children. Since there was not a cultural and training center, it was decided to design such a center in Kish Island in order to pay attention to the training structures in Kish. This study was descriptive-analytical and the required data were gathered through library and field way. Children are the main variable and creating the sense of belonging is the dependent variable and in line with the dependent variable the other dependent variables are peace, security, the concept of color, nature, and children psychology.

Keywords: Promotion of creativity, exceptional talents, learning environment, children, nature, sense of belonging

Introduction
The importance of teaching children as the future of a country is what all communities are aware of. This leads to attempts to provide age-appropriate education in desirable environments by different communities. This environment should meet children’s physical and psychological needs. What is needed for an individual to become a useful person to society is potentially present in their nature and only needs a proper context to develop. This context not only includes a mere physical environment, but also the space which is effective in shaping the individuals’ personality, prosperity of talents and mental relaxation (Fayzi, 1997). Such an effective space after family environment is certainly educational environment. Apart from the environmental and human factors involved in education issues such as school building and its location, environmental factors such as light, color, noise, green space, climatic conditions and are also important in achieving this goal. In other words, educational facilities must be physically desirable. Desirable physical space is a space that standards and indicators such as the accessibility, distribution, and utility capacity and compatibility, etc. are observed in its design (Kamelnia, 2009). On the other hand, in recent years, changing attitudes towards training to one-dimensional educational system which was teacher oriented, changes in the structure of the learning environment in the world were created. As a result, such changes require providing spaces contrary to the former educational spaces limited to some classes and a corridor.
What needs not to be neglected is the importance of the natural environment in learning. Organizing green space of learning environment contrary to what is currently visible in our schools limited to only one paved ground and a line that determines the ends of playground. Creating desirable environments and providing equal opportunities in the enjoyment of a good learning environment for middle class, paying more attention to children with motion disabilities and making the environment appropriate are objectives of this research. As the children’s growth and learning from the early stages of birthday is very important, training children in the natural environment makes the senses of motion- sensory-touching reinforced. Teaching architecture in the natural environment has always been effective in order to encourage creativity. According to previous studies, children exposed to the natural environment have natural behaviors than children who have grown in artificial environments and when the brain has not been fully formed, have high potential to understand the environment and children connecting with nature are more useful, more social and more successful in the society. According to the goal, some questions were prepared to determine the rate of consideration to the natural environment around the child in an Iranian family which is important in a child's learning attention.

Due to the absence of such a center in Iran, it was decided to establish this center on Kish Island in order to pay attention the educational structure of the island, because in the island it seems that due to the volume of visitors and attention to business centers and hotels, training centers have been neglected. Also, forms are more examined in the design due to hot and humid climate and include restrictions such as arrangement, an intense light openings in the island that affect the type of form, materials, height and so on.

**Methodology**

This study is based on a descriptive-analytic method.

Descriptive study: The aim of this study is to describe a situation or field conditions in details. Since this study is to describe and interpret situations and relations and the current situation studies specific issues it matches descriptive method.

Analytical study: The explicit content and messages in a text can be systematically described in this method. In other words, in this method, analysis of elements and their relationships with each other are systematically and purposefully determined based on texts, maps, images and the specific characteristics of the documents.

**Training environments**

Barker (1953), founder, ecological psychologist believes that there are a certain relationship between physical and behavioral dimensions of architecture in physical bases. Spaces such as classrooms, workshops and camps are or entire spaces of schools are considered as bases. Benches in a classroom and how they are arranged in space or the architecture of school space, physical dimensions, architecture, education, and all actions in the classroom and at school are called behavioral dimension. In Barker ecological theory the social and organizing dimensions of the base are regarded and it is said anyone with exposure to physical and behavioral basses are responsible for certain social roles.

**The principles of designing educational buildings**

There are 12 indices in the field of physical factors related to educational facilities and attractive categorized and explained in six parts. The first five parts are the attractiveness of the classes and the sixth one is about the training facilities of the classes:

- Light and related factors such as the amount and intensity of light, light type (natural or artificial);
Appearance dimensions of classes including walls, class doors and floor, area and space per capita;
- Heating and conditioning classes;
- Voice and related factors;
- Organizing and arrangement of classes.

**Talent**

Different definitions of talent are offered. Klein (Klein), in *Handbook of Psychological Assessment* defines talent as a set of capabilities that is valuable in certain cultures. There are two kinds of talents: special talents and public talents (Pashasharifi, 1997). Special talents are valuable in certain situations. For example, musical talent is essential for who wants to specialize in the fields of music. Public talents may be considered valuable in different situations. Verbal talents are among public talents that in most situations have main role. However, verbal talents in professions such as journalism are more important than the profession of car mechanic in job position (Ganji, 2003).

**Conceptual domains of exceptional talents**

In the literature on the subject of exceptional talents, from the beginning till now, a significant change in the definitions and examples of talent has been done. The short history of this topic relates to 20th century but in the recent century the conceptual domains of exceptional talents have been greatly developed and varied. Maybe at the beginning of the century, the most important method for identification of gifted people was the use of IQ tests. Of course, this method in the second half of the twentieth century as a result of the accumulation of scientific experience and extensive research turned to more sophisticated methods. However, it has been assured that human talents cannot be measured and evaluated just by a simple IQ formula and the available tests, in fact, Complex and varied human potentials which is a quality trait reduces to quantity trait. Therefore, new and complex scales are used to assess human’s creativity and diverse talents (Ganji, 2003).

With new scales, it can be said that from every one hundred children, two to five children are clever and from every one thousand individuals only one person is highly clever. Talented people are often called with titles like genius and, gifted. All these titles refer to individuals whose
intelligence and talents in different fields are more excellent than others. Since the gifted and talented people’s accountability, nurturing and development are assigned to training institutions mainly in social systems; therefore, issues and theoretical and practical challenges in the field of exceptional talents, is concentrated in the field of educational systems in the world.

**Creativity**

Creativity is a vague term. It is very difficult to provide an exact definition of it. Researchers have had different conceptions of creativity, and consequently have had different definition of it. Different opinions in this regard are due to the complex nature of the brain acts. Creativity in its literal meaning is interpreted as the power to create and to create novel works (Mohammad Moin, 1983). Some defined creativity as a combination of strength, flexibility and sensitivity against Comments that enables the learner to think of different and productive results out of the consequences of irrational thinking resulted in personal and probably others’ satisfaction. Therefore, creativity is a mental process that can be seen from a certain person at a certain time, a process by which a new work from a new idea or something different is produced. New and different production can be verbal or non-verbal and objective or subjective.

![Image of children engaged in an educational activity.](http://www.javanehapreschool.com)

**Figure 2: Javaneha Kindergarten in Shiraz**

In other words, creative person tends to solve problems in different ways; however, there is one solution for it apparently. Imaginative thought is one of the most effective ways to stimulate creativity, because imagination is a kind of free thinking by which the human brain regards solving a real problem. According to the creativity definition given above it is tried to solve the question of how can creativity be developed and expanded. But before it, it should be said that creativity is a developable issue and all people own potential creativity ability. In order to develop creativity the following issues should be considered:

- Since creativity is something individual and each person according to individual and unique abilities can act to expand it, to strengthen it, unique and individual abilities should be regarded and evaluated.
- The value of sensitivity plays an important role in understanding problems; therefore, individual creativity can be developed through increasing and developing accuracy and sensitivity in understanding the problems.
- Undoubtedly, testing, experimenting and exploring are directly related to creativity; therefore, in order to grow it is needed to act through increasing experience, research and various.

Openly accessible at [http://www.european-science.com](http://www.european-science.com)
Schools play a crucial role in the prosperity and fertility of students’ creativity. Schools can foster creative thinking and train creative, innovative and productive students. Schools as an operational unit of education system and as a place, in which formal education is going on, can boost their students’ power of thought and intellectual skills so that they could easily achieve appropriate and realistic solutions to create new ideas. In general, philosophy, views and educational methods used in schools as well as the atmosphere and the conditions governing it have great impacts on the creation of creative thinking in students. Unfortunately, nowadays, schools according to old habits traditionally rely on students’ memory and teachers prefer repeated responses rather than thinking. Our schools are more following the principle of finality which is based on the thought that there is only one correct response for every question and the rest of the responses are incorrect. At the end it can be said that the schools with a regular schedule and responsible members and teachers are the best environment to nurture students’ creativity. A good school can be a context for creative thinking in students and has features as follows:

- An atmosphere of security and freedom governs it;
- It is a friendly environment in which individuals’ works and attempts are appreciated;
- It is an environment in which there are learning and responsibility opportunities;
- It is an environment in which there are opportunities to learn;
- It is an environment in which there are essential facilities to public evaluation.

In order to make schools play the most important role in developing students’ creativity, psychologists have suggested that the issues offered to students should be classified and their achievements should be encouraged. Also, the possibility of practical teaching should be provided. "Professor Lawson," says: of all the architectural projects that should be designed, none can be as attractive and pleasing than schools.

The concept of baby

According to Moein Persian Dictionary, child means small and an individual has not reached the mature level. Iran Statistical Center, in this case defines the word child as an individual who has not been allowed to have a job and work in that job; in this definition child is at most 15 years old. Children are the most sensitive and the most affected age group in the society and in the most sensitive and most important years of their lives in which the foundations of their personal, mental, physical and social development are formed until they enter the town need to experience social life in their scales and this requires children to be in a friendly environment full of happiness in order to show and express new thoughts and skills and provide an opportunity for their creativities.
**Architecture for children**

The definition of child has changed in different historical periods and to interact with them a variety of ways have been suggested. Once the child was defined as an adult who has a smaller size; thus, all human beings are equal in terms of biological structure. Therefore, all were equally exposed to the same information with the same message, language and mode of expression (Postman 1999). By defining child as an independent period, efforts to provide childish form of affairs from children’s issues began. Children's education, children's literature, children's clothing style are all a product of this effort. Today in which, the boundaries between childhood and adulthood are collapsing by the domination of the media (Postman 1999), it is necessary to reinforce the definition of a child by providing the possibility to grow children in a space expressed by childish environmental factors.

The artificial environment, including interior and exterior design is an example of the environments affecting the child. Children's architectural environment is important, because children receive some essential information and experiences from their surrounding physical environment (Sharp, 1984). Children’s needs and their language form children's architectural titles and health, sports, recreation and culture and education, applications especially for children are introduced in different way from adults. The difference between these groups of buildings with the similar titles designed for adults caused by the quality of current activity and differences in the scale which itself arises from differences in standards that make the space applied for each of the two groups of contacts.

**Sense of belonging to a place**

Belonging to a place is a higher level than sense of a place that receives significant roles in order to make people take advantages and present in a place. Belonging to a place created based on the sense of a place goes beyond the awareness of accommodation in a place. This sense leads to individuals’ link to a place in which human considers themselves as a part of the place and based on their experiences from signs, functions, meanings and characteristics regards an image of their place in their mind and respect it. From the perspective of phenomenologists, sense of a place means linking to a place by understanding the samples and current activities. This sense can be created in an individual’s life and gets developed by passing the time. Sense of a place not only causes coordination and proper function of architecture space and human but as a factor for sense of security, enjoyment, and individuals’ emotional understandings and helps the individuals’ identity and their sense of belonging to a place (sarmast, 1933).
In scientific fields such as psychology, sociology and anthropology terms of belonging to a place, belonging to a community, structure, emotion, meaning and experience are the most important discussions about sense of place. Belonging to a place means people define themselves based on a place in which they were born and grow. This connection generally called sense of a place affects people deeply and reinforce their identity and power. In fact, sense of belonging to a place is a level higher than sense of a place that plays significant role in every situation and space in order to take advantages and continuous presence of human in a place (Felahat, 1931).

The sense of belonging playing an important for the human’s enjoyment and their continuous presence in space leads to the connection of individuals’ with tissues, therefor, human beings consider themselves a part of the tissues and think of a role for the tissues in their minds based on their individual experiences from the signs, meanings, functions, and characteristics. This role is unique to him and therefore the place becomes important and respected for him. It is in this case that by inserting the fresh spirit to the tissue, it is possible to use it and give quality to space and understand its beauty. In general, it should be noted that the best phase of the relation between human and space is a sense of belonging and commitment to space. The sense is made of the two factors of space and human together and the changes of each one are effective on the rate of belonging (Masoud, et al., 1931). It seems that the power of understanding signs and symbols of a place is often the smallest and the least prerequisite for fostering a sense of belonging in a community which can be a needed for a beautiful environment in a tissue. But now, in the contemporary urbanization perspective, the relationship between human and space has been reduced to urban images material and public spaces play only as a space for traffic and transport and by this definition some believe that the human have lost their perception of the past spaces; therefore, careful reconsideration to the relationship between humans and space could lead to ways to improve the quality of this relationship that adds to the beauty of the space (Tavasoli and Bonyadi, 2007).

**Nature and sense of belonging**

Many contemporary scholars believe that sense of belonging to a place and to maintain nature and harmony with it depends on each other. Theorists such as Chermayeff and Alexander studied the vacuum left by moving away from the nature in the modern human's life. They described...
human’s friendly contacts with the nature as great happiness (Chermayeff and Alexander, 1974). Since we are part of nature, in order to become complete human beings it is needed to have contact with it (Andrew Brennan Bell, 2003). Theorists such as Bell and Espirin analyzed the hidden aspects of nature and indirect signs of nature such as the diversity, complexity and mystery and tried to provide patterns for the identity of the man-made spaces by being inspired by natural processes. Schultz (2010) with the emphasis on the role of natural elements in achieving sense of belonging to a place and giving objectivity to the meaning are the architects’ tasks that in this regard, natural place will be a guideline for man-made places. On one hand, he think of understanding nature in line with mental growth and growth with obtaining physical quality of natural components and on the other hand defined the mutual relations between components of disciplines and messages, etc by semantic perception.

Religious insight that comes from Islamic verses and traditions recommends in operation while construction in nature. In this regard, traditionalist thinkers believe that the presence and expression of nature in architecture is essential for architecture resulting from this insight and prerequisite to improve the meaning of a place.

**The effects of interaction with nature in educational spaces**

The theory of psychological evolution and restoring the attention are two important theories expressing the benefits of connecting with the nature. The theory of psychological evolution of natural places has effects such as reducing stress and creating peace for individuals. In this theory, the nature by providing a desirable physical environment visually reduces the stress and by producing positive feelings and limiting negative thoughts nurtures a general sense of healthy. This theory focuses on sensory mechanisms; therefore, it expresses positive effects with nature on reducing stress and increasing psychological peace in educational environments (Matsuka, 2010). The students are constantly concerned with environmental information surrounding them in educational environments. Since the students’ ability to collect and understand the input data is limited, hence they need to increase the value of their concentration and mind’s focus in this field. Presence in nature and watching the natural landscape that increases the focus on the parameters affecting creativity plays an important role in children’s creativity. Connection with nature in
contrast to the negative effects that may have for routine and repetitive tasks and increases
distraction has positive impacts on creative activities and leads to accelerating the production of
different responses and ideas and beside it, plays an important role in improving children’s memory
(Marc, 2008).

Conclusion
Schools’ educational activities should be provided and implemented in a proper space, with
good facilities and based on the students’ needs and interests in different backgrounds so that
teachers get interested in teaching and students get interested and motivated in learning and feel
satisfied from their activities. The importance of outer space in the educational environment has
been studied in various aspects by child psychology researchers and theorists. According to the
educational theories, nature is the center of all learning and the beauties in nature causes better
thinking growth in adults’ ages. In order to protect the students and teachers’ health, psychological
security and safety, it is needed to regards physical variables and to follow the principles of
construction in new educational spaces. Schools with lack or little light lead to early eye fatigue and
finally students’ inattention to the lessons. Achieving peace and access to it is possible when the
psychological and intellectual characteristics of human be consistent with the educational buildings;
therefore, in designing and implementing educational spaces it should be acted so that the
unfavorable climatic conditions and factors get reduced to minimum and environmental conditions
such as light, ventilation, humidity, radiation, especially temperature, should be kept at an optimal
level for learners. If open space (campus) in schools were greener with more sports recreational
facilities, the rate of sense of belonging in students would be more. In designing the classes of
school it should be tried to utilize natural light as much as possible but in the case of need, the
combination of artificial and natural lights leads to creating appropriate space in class. Choosing the
right paint has a significant impact on the students’ morale and psyche and applying light colors has
positive effects on the students psyche and creates peace and quiet in the space and finally helps the
students’ learning and concentration. It should also be noted that the nature of the nature revivalist,
symbolic and important place of nature in Iranians culture and mentality and climate highlighting
the role of nature are of the most important factors affecting the issue. The results show that the
presence of children in the nature or existence of nature in their educational centers has a great
impact on their physical and mental health and causes them to be creative And a sense of belonging
to nature and the environment in which they occur and a kind of sense of belonging to nature and environment will be created in them which leads to development and evolution in their future lives.

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