

Studying the process of education and open architecture of schools

Abstract

The purpose of this study is education and the open architecture of schools. The research method is descriptive-analytical and uses library resources. This educational study is in line with the educational study of the educational values in the era of globalization with the era of the collector hunter, and according to this agreement, tries to identify the factor that led to the realization of educational values in the primary age as a solution. The period when all education took place in nature was the bedrock of the first human life. Therefore, the nature bed is an important factor in the realization of educational values during the hunter-gatherer era, so man today needs to refer to and communicate with nature to achieve his educational values. Therefore, the presence of nature in educational spaces for children today, who spend many hours in the modeling and learning ages, can be an important factor in reconnecting children and nature. The presence of nature in the educational space creates indoor space (educational spaces) and outdoor spaces (nature) in the educational place called school. School design in the present age (the age of globalization) through the fundamental relationship between the inside (educational space) and outside (nature) in architecture, create educational spaces without borders, which in this study is described as designing a school without borders concerning nature.

Keywords: *educational space, open architecture of schools, nature ,educational spaces.*

Zahra Davoudi

*Master of Architecture, Pardisan University of Fereydunkenar,Iran
Corresponding author:
davoudizahra17@gmail.com*

Zahra Alinia

*Lecturer in the Department of Architecture, Pardisan University of Fereydunkenar, Iran
Zahra.alinia73@gmail.com*

Mohsen Zarei

*Master of Architecture, Pardisan University of Fereydunkenar,Iran
s.mohsen.zarei@gmail.com*

Introduction

Over the last few years, we have witnessed difficulties and a serious decline in valuable situations for children in a healthy environment. Difficulties that involve both children and nature. Because if a man can not experience the understanding of living in the natural space as a part of the universe, he can not be a supporter, in the same direction and the same direction as nature. Perhaps the solution to these problems is to correct our children's educational methods; Because our children spend a lot of time during the day, the most important time, to set an example and learn in school. Therefore, to keep human beings in sync with nature and upbringing and growth in all aspects of human beings and wealth, it is better to use the method of building natural areas suitable for the upbringing and synthesizing our children, and gaining the necessary skills through direct and motivational experiences.

The educational spaces of today's world should encourage graduates to make discoveries in the new realms of the developing world and keep them in sync with the rapid evolution and change in the world of science and technology. One of the most effective environments for discovering children is nature, which is one of the most effective environments for reconnecting children with their natural environment since changes in their lifestyles have prevented children from acquiring the necessary life skills in the natural world. Different aspects of work that nature is important in educational spaces Differences in these functions can be an important factor in how to design natural space and how they are present in the educational space and thus make these spaces efficient.

In addition, strengths in the development of skills are found in children; And they can be used as a level of educational

facilities and tools in appropriate fields to flourish various spectrums of upbringing and development of children. At the same time, natural areas provide comfort and peace of mind in educational spaces, as well as create a sense of security for children as much as possible in schools.

For this reason, if we consider the useful advances in communication knowledge in education as a kind of awareness, teaching and educating students is not only influenced by the words of a teacher but also by other factors such as teaching through non-verbal communication more physically than other educational factors. Students will be effective in learning and other aspects of education. Therefore, learning lessons is not only done in educational classes. The issue of how much educational spaces are included in learning and adequate results after education, has been the study and research of environmental psychologists for years and has created the idea that educational spaces today with a system of incentives to Facilitate constant hard work for students.

The greatest goal in the field of human education is for individuals to be able to use the capabilities entrusted to them by God the Creator to the highest degree of utilization. Posology Since we are talking about school and education, and here we refer directly to the school of nature, we should not ignore the inherent lessons.

By freeing the child to express dreams and build imagination, we must allow him to talk to nature and make friends with harmless animals such as butterflies, bees, and ants. [1] In the educational environment, students are constantly dealing with the environmental information that surrounds them. Since students' mastery of collecting and understanding basic concepts is limited, students are required to increase the degree of attention and attention of their minds in this regard [2].

Accordingly, the purpose of this study is education and the open architecture of schools.

Theoretical foundations of research

Human space architecture

Spatial communication between people is a complex system of the desire to be close, escape, ignore, ignore, etc. For this reason, architectural space can not be designed only according to mathematical space, but it is necessary to design the space in such a way that all communication between Socio-psychological human beings should be strengthened or at least not disturbed.

1. Architects' views of space

In the field of theorizing architectural space, we can refer to the influential writings of "Gideon" (2012), "Zoe" (2008), and "Nobarg-Schultz" (2009; 2014). As an art historian, Gideon examines the origins of modern-day spatial change in the context of artistic currents. His main argument in formulating the spatial features of the contemporary era is to point out the gaps that have arisen as a result of not paying attention to the role of art and artists in all aspects of life and their ability to create new feelings of the world. Using the ideas of modern art - especially the evolution of Cubism in "communication" and "movement" and "time" spatial ideas - he has introduced the element as the most important categories related to the "inside and outside" of architectural space. Unlike Gideon, Zoe seeks to distinguish architecture from other arts, and in doing so uses the element of space - which allows for a true experience of the architectural work. Nevertheless, like Gideon, he has considered the concepts of time and movement as well as the physical presence of the audience in the interior as the main topics.

2. Indicators of architectural space

Three types of dominant views can be seen in describing the characteristics of architectural space, which are briefly described.

The first view: According to this view, the idea of space has emerged from the cultural requirements of modern thought and it is only in this period that with the subsequent addition of time, space as the "internal content" of architecture has reached its true value and meaning; Therefore, the indicators of space in this thinking are completely based on modernist slogans

Second view: This critical view began with the theories of Robert Venturi, who, by criticizing the unlimited freedom of space, questioned the boldest message of modern architecture - the psychic space - and called for the revival of the old tradition of "closed and contrasting interior space." He considered the main purpose of interior spaces to be to create a "fence" and "distinguish the inside from the outside."

Third view: In this thinking, without tending to one of the dualities, the basic properties of space have been extracted. Siegfried Gideon, one of the first founders of this balanced

view, praised the approach of new architecture to "sculpture" and called attention to the "effect of volume in space", calling for a balance in spatial features.

3. Relationship between inside and outside (dual nature of space)

The mediator between inside and outside in architecture is in the simplest case a "wall" or wall without spatial characteristics; In this case, the lowest level of coexistence is possible, but in the evolution and complexity of architecture, the middle space replaces the retaining form and becomes almost a necessary component in the architecture. Intermediate spaces are essential for recognizing objects. Without these spaces, the independent recognition of objects is not practical, and besides, the spaces in between play a very important role in the relationship of individual elements with each other, which in architecture is called the space between, is intermediate. The interstitial phenomenon inside and outside is the result of "both this and that". Intermediate or suspension can be defined by referring to a carrier who speaks of one of the methods of influence and interference, which is "overlapping". For the interaction and communication of the space inside and outside the side, space is called the space between, which is called the space between, and the architecture of the space between, the architecture of relationships and contacts, the architecture without limits, etc., which aims to merge the new space between Is out; But concerning the interior and exterior space in architecture, we can name another additional space called space.

4. space

Space is a space that has a formal, conceptual and functional richness and by raising the meaning and sense of place and various functions, it gives nature and role to the space that the audience of the space, even after several centuries of its creation, receives meanings, not Just like the one that the architect intended, that which is innate and is like the audience of the audience. Space affects the type of human thoughts about space and leaves a perceptual experience in the mind of the audience, even if they are not aware that it ultimately leads to pure spatial experiences

5. Infinite and infinite

Perception of spatial structure is mediated by sensory, imaginary, and intellectual powers. Receiving space through the five senses is limited. In this perception, space is a container that is enclosed and limited by a border. therefore; Borders create different and varied spaces that cause multiplicity. Bounded space is like a small world in which space or soul is the most hidden and body or border is the most prominent feature. In this perception, space is enclosed by a border as a hidden treasure. In sensory perception, architectural space is plural, enclosed, limited, internal, and hierarchical;

And each of the spaces has a unique definition with precise details and special geometry.

Education and school architecture in the world (from the beginning to the 19th century)

Studies and research show that early humans lived as hunter-gatherers for relatively thousands of years in relatively stable conditions. , Move from place to place within large but distinct boundaries. The way of life is hunter-gatherer, collector, wise and masterful, but it is not work-oriented. Hunter-Collector To be efficient, people had to have in-depth knowledge of the plants and animals they needed and the spaces in which they searched for food.

Paying attention to the statement that has been made about the realization and investigation of human life shows that the fishermen, unlike us, did not differentiate between fun and effort. They grew up having fun while hunting and gathering, and little by little they started serious activities while having fun. They had no idea about hard work. Therefore, in this period, the man responds to his instinctual needs by being in the bed of nature and by observing around him, and learning from losing in nature and being with it, learns from the bed of his life. She learns how to respond to her instinctual needs, pass them on to her children, and raise and educate her child. Anthropologists based the hunter-gatherer lifestyle on child rearing and education based on values and principles.

As almost all researchers who have studied this culture describe, the core values of the collector hunter style are: independence, participation and equality, breeding with confidence, technical knowledge and skills, social skills and values, and self-control.

Although adults in the hunter-gatherer culture do not try to control, guide, or motivate their children, they help educate children by responding to their needs. When children ask adults to show them how to do something or to help them do it, adults are ready to serve. As one group of researchers says of hunter-gatherers, "Sharing and sharing are the core values of hunter-gatherers, so what one knows is obvious and accessible to all; "If a child wants to learn something, others are required to share their knowledge or skills with him."

In the culture of the hunter-gatherer, sharing, which is one of the most important human traits and social values, is also present in infants' play, in which the grandmother cultivates and shares infants by directing their hands towards others. Get acquainted; And to be successful, an adult hunter-gatherer must not only share and cooperate with others but must also demand his or her needs and wants effectively, without inciting hostility from others. Practice for such an existential tool takes place everywhere through play; That is when players discuss the rules and decide which part to play. In addition, the hunter-gatherer children of this tool practice existence in a fully

calculated and measured way by imitating the discussions of adults [3].

The invention of agriculture caused a storm of increasing changes in human lifestyles, changes that far exceeded the speed of natural selection; The changes we have had to best adapt to the biological machine that evolved to meet our needs as a hunter-gatherer. In farming, with sustainable food storage, people could have more children. Agriculture also allowed (forced) people to live in permanent settlements near their crops instead of migrating, But these changes came at a heavy cost. Successful farming required long hours of relatively unskilled, repetitive work, most of which could be done by children. In larger families, children had to work on farms to help feed their younger siblings or to care for them at home. The children's lives gradually changed from the free pursuit of their interests to the increasing work to serve the rest of the family.

In the fifteenth century in France, Spain, and England, with the rise of kings and the weakening of the nobility, feudal lords gave way to absolute monarchy. Changes in economic conditions led to religious upheavals. By the end of the seventeenth century, Christian schools existed throughout Europe and the American colonies. The main teaching methods in this type of school (Christian schools) were to remember without reason that they intended to implement this method instead of flourishing the power of questioning and investigation and control over individuals. In addition, the schools were designed to strengthen the Christian spirit [4].

At this point in history, the idea that the child's preferences and desires are valuable was completely forgotten. Physical force that has long been used to employ children on farms and factories has now been transferred to schools to force children to learn. Frank believed that the most effective way to break a child's will was through constant supervision and control at school. "Children do not know how to manage their lives, and when they are left to fend for themselves, they are naturally drawn to vain and sinful behavior," he wrote. For this reason, in this school (patism schools) it is a rule that a student should never be allowed to be without a supervisor. The presence of an observer prevents the child's tendency and desire for wrong behavior and gradually weakens his arbitrariness and self-control. The belief that children can not make wise and rational decisions is the cornerstone of our compulsory and closely supervised education system [5].

Eventually, by the beginning of the nineteenth century, churches across Europe had lost political power, and governments had taken on the responsibility of educating young people. Over time, the school year became longer because it was initially twelve weeks a year, and with the increase in school year length, school years, homework and standardization, and the ever-increasing importance of exams

for a child's progress from one grade to another, the school gradually affects children's lives. And families took over. In the 19th century, education had a unified system and was

standardized. The evolution of education and school architecture in the world is shown in Table 1.

Table 1: The evolution of school education and architecture in the world (from the beginning to the 19th century)

the period	Educational values	Architecture
Hunter - Collector (Beginning to the 5th century)	- Knowledge-oriented - Skill-oriented - Independence, Equal participation - Cultivation with trust - Skills and social value - Self-mastery Self-mastery	The bed of nature
Agriculture (From the 5th to the 15th century)	- Work-oriented - control - reduction of freedom - private property	Nature
Feudal system and industry (16th century)	Work-oriented - lack of freedom - inequality and equality - class differences - obedience and obedience	Church and Deer and Esco Tires
Religious schools (17th century)	- Teacher-centered - Lack of freedom - Compulsory education - Obedient and obedient	Church schools and religious centers
Compulsory schools (18th century)	Teacher-centered - Lack of freedom - Lack of will and desire of the child - Control and supervision	Plan of a rectangular or square cube (box) and classes of four walls. Closed plan
Compulsory public schools (19th century)	- Teacher-centered - Integrated education - Continuous control and supervision - Lack of freedom - Lack of responsibility - Lack of cooperation - Lack of critical thinking - Decrease in skills and information	Plan of a rectangular or square cube (box) and four-walled classrooms with corridors. Closed plan

Education and school architecture in Iran

The education program in our country's educational organization had a playful and militant perspective in one part, and in another part, it dealt with religious, social, and behavioral issues. Children in educational centers pursued the goal of learning to read and write, and of course, these types of goals were different in different educational centers. Girls, like boys, were educated in the early stages of education. The training started from sunrise to noon and continued in different seasons with the shortening of the day until sunset. In countries, as in ancient societies, the basis of education was based on memorization, but still reading and writing were given much importance, and tools such as coal were used. Education in libraries can be pondered before schools are established. At first, it was not organized, and wherever there

was a scholar or religious scholar, those who were eager to learn science gathered around them; And were benefited by the scholars, and by the scholars and the learned were infinitely independent of action. Appearance and diagram of the first Pahlavi and the situation of political developments, 1306 AH. The seminarians and the clergy went out of their way, leaving only the graduates of the West in charge of the education system, in a way that the religious were left out without interfering in the profession. And the generalization of education and the government's domination of education took place. And it led to the emergence of a centralized education system and the reform and standardization of the curriculum. It is the beginning of compulsory public schools in Iran. Table 2 shows the type of architecture of Iranian schools.

Table 2: Iranian school architecture (from the beginning to the 19th century)

Iranian school architecture from yesterday to today				
the period	Type of	Pattern Designing	Pattern feature of each era	School

	School and educational space			
Saljoughi	Mosque-school	Four porches	Sunni four-sect	Military
Ilkhani	School and monastery	Two porches	Unobstructed and circulating space flow in Around the yard	Emamiye
Timurids	School	Four porches	The golden age of Iranian schools It has a large muqarnas	Dodar, Prizad and Balaser - 3 schools
Safavid	School	Four porches Central courtyard	Medium size	Sadr
	School			Jaddekuchak
	School			King's mother Four garden
Qajar	School	Moonlight Central courtyard	Remove the accommodation cell Downstairs has a yard The upper floor has a back	Dar Al-Fonun (Education in New Iran)
				Sepah Salar
				aghazorg
pahlavi	Mosque-school-school	Corridor rows	Modern schools look completely different from traditional schools	Makar
				Alborz
Republic Islamic	School	Corridors in the right corner of the corridor	Remove the porch Has a rectangular cube geometry	Javad Abad

Studies on the history of education in the world and Iran indicate that; Compulsory education in government-controlled schools has continued for many years and sometimes has.

Open schools

Rapid reactions against traditional schools have been one of the main factors in introducing open-plan educational centers. Open schools have open plans and education is individual and group and the function of spaces is involved with the concepts of education. In these schools, classrooms changed from a uniform form of education to a series of individual training and

smaller groups of graduates. School without Borders in the design of educational spaces to factors such as:

- Symbolic factors: which are related to mental concepts that are considered concerning a particular place.
- Organizational-social dimensions: "Summer" believes that the restriction of movement is emphasized and intensified by the organizational laws of educational environments, and these restrictions weaken the student's "self-concept".
- Physical-architectural factors: which are affected by issues such as heat, cold, light, sound and. will pay

• Cognitive-individual factors: the effect of issues such as intelligence, growth, personality, motivations, and ...

Pays a lot of attention; And paying attention to these factors in the design makes the school,

- 1- It must have a quality in which case it has an identity.
- 2- Have a sense of security that leads to satisfaction.
- 3- Have a sense of belonging.
- 4- Have a correct knowledge of spaces so that it has characteristics.

The idea of an open school has been created in various patterns, including the size of schools (large schools - small schools), the school as a community, the social school, the core school, etc. in the field of learning development.

School size (large schools - small schools)

The controversy over large schools began in the mid-1960s with textbooks for large and small schools. In these books, he explores the differences between large and small schools in the reactions of graduates. Most researchers believe that there is no boundary between the schools on which we have already reached an agreement. In some explanations, small schools are recommended for 350 students in primary school and less than 200 students in secondary school. However, on average, 300 to

400 students can be considered for primary schools and 400 to 800 students for high schools.

Education in smaller schools is done individually and in close interaction with the out-of-school environment. In addition, the conclusions of research on these schools show that networking, collaborative research, and learning in small schools will make them feel more responsible for their careers. In evaluating these types of schools, it has been suggested that when graduates deal with fewer teachers, the effect of bad experiences, no matter how worthless, becomes greater.

In public schools, boarding schools or activity-enhancing schools are also called schools that provide standardized education that supports a wide range of community-based efforts and provides opportunities for student development. Public schools have a very important impact on the lives of children and their parents and society. To create a large group for adequate support for the perfection of children during adolescence.

Nuclear schools are created by merging several small schools; Some features are common to each other, but each school has its unique environment, and the separation of schools can be done by separating schools at different educational levels.

Examples of core schools can be seen in small school models.

Table 3: Education and architecture in the 20th century

The period	Educational values	Architecture
Public Schools (Early 20th century)	- Teacher-centered - Constant control and supervision - Lack of freedom - Lack of responsibility - Lack of cooperation - Lack of critical thinking - Decrease in skills and information .	Plan a rectangular or square cube (box) and four-walled classrooms with corridors and the use of wide skylights in connection with the outside. Semi-open plan
Nature schools (Before the 60s)	Student-centered - Peace and comfort - Equality and equality - Independence - Skills-Self-mastery .	The bed of nature
Open schools without walls The 30s, 70s, and 80s	Student-centered -based knowledge - peace, comfort - security - skills training - identification - a sense of belonging - social communication - equality and equality - attention to the body	Open and flexible school plan and attention to the physical aspect

METHODS

The study method in this research was carried out in a library and by referring to the professor, books and similar research in an analytical way.

RESULT

Education in the 21st Century (Contemporary Age of Globalization)

In a world of rapid change and interdependence (globalization), education can help young people overcome current and future challenges. Teaching globalization to young

people and children provides an opportunity to develop critical thinking about the complexity of global issues in a safe classroom environment. This is something that children of all ages need. In global education, the goal is to encourage students to become aware of and think critically about their position and background concerning local and global issues.

Another goal of global education is responsible education. In responsible education in the age of globalization, there are two important aspects of responsibility. Individual responsibility emphasizes individual moral characteristics and collective responsibility that includes the responsibility to others and other cultural and religious groups. Learners are responsible for individuals who are not completely autonomous because they accept collective and personal responsibility for the good and the public beyond individual interests. Multidimensional education of knowledge and skills is another goal of global education, whose attitudes consist of the confrontation of global knowledge with local knowledge to create people who are members of a particular nationality.

With a holistic approach to globalization education, it can be said that education emphasizes growth, capabilities, and individual strength as an individual and as a member of society. This approach encompasses the whole human being and develops the intellectual, emotional, and volitional potentials and abilities, and trains the mind, heart, and emotions. So learning and the concept of how to learn to play a vital role in raising future children to adapt to new situations that arise in their social and personal lives. Another requirement for learning is a better understanding of others and the world, along with great and complete respect and marriage with differences, disruptive and adaptive relationships.

Child's perception of the environment

The child's relationship with his environment is a function of his set of five senses. His subconscious image of himself and his life is formed from the feedback of components received by his senses in a vastly constructed environment. Through the eye, much more information is sent to the nervous system than the sense of touch; But the spatial perceptions of the senses of sight and touch are so intertwined that they cannot be separated. James Gibson associates vision with touch and believes that the two senses reinforce each other.

One of the common theories in the field of cognitive sciences is that all mental functions are not only separate from the body, but also depend on the organs of the body, and all the conscious and conscious activities of people can be attributed to material causes.

. It is through this connection that man can live in his environment. The connection between the sensory and motor centers in the brain creates a connection between humans and the environment.

Children also receive responses from neutral or inactive environments (the younger the child, the more pronounced this is). The reason for this is the huge difference in the way children and adults look at the environment. Adults see the environment in the form of forms, shapes, structures, and backgrounds; But children interpret the whole environment at once and evaluate it for all the activities they can do to interact with it. They use the environment as a tool for their growth. They see the environment as an opportunity given to them to do all that can be done.

In addition, their interpretation of the environment and their mental image is based more on the functional possibilities of the environment than on its shape; So, for example, if something like a bench is in a public place, adults use it only as a place to sit, while children use it as a tool for jumping, lying down and climbing, or a place to hide.

School Without Borders in Connection with Nature (Suggested School for the Present Age)

School without Borders has been proposed based on the study of educational philosophy and educational architecture in historical periods and by recognizing the educational values, scientific knowledge of the child, and his way of life in the age of globalization. School Without Borders is a school in which the friendship between educational theories and educational spaces is more important. It emphasizes individual and group education that leads to effective and enjoyable education. This perspective (attention to mind and behavior) of learning in this school has goals that include, more emphasis on teaching rather than teaching, encouraging students' independence and initiative, looking at learning as a process, paying attention to how students learn. Encouraging children to connect with others and their teacher, emphasize the context in which learning takes place, and teachers are more of a mentor and ... In general, it seeks to downplay the role of the teacher and the self-centered guidance of students. These are the learning goals of the age of globalization. In this regard, to achieve the comprehensive goals of learning and designing, it pays much attention to the psychology of educational spaces and seeks to minimize the factors affecting specific behavior in an educational environment so that it can guess and determine the outcome of behavioral output.

School without Borders, with its connection to nature (as a way to realize the educational values of the age of globalization), has a dual nature of architecture, ie inside and outside; And for communication inside and outside the spaces between, space and borderless spaces are used, according to which, space has characteristics such as dynamism, stimulation, flexibility, diversity, active and inactive, personal; And uses the order in nature (the order of the universe), that is, the same order in disorder, to organize the spaces inside and outside and the

communicator, which is a part of the whole school. Therefore, based on the characteristics and indicators of the educational space in the school without borders, the school has characteristics that include the following:

- Stimulating environments - Spaces for group learning - Indoor and outdoor communication - Public spaces - Health - Spatial diversity
- Change of effects - Flexibility - Active and inactive spaces - Personal spaces

Discussion

The architecture of the school depends on its educational philosophy. Accordingly, to design a school, it is necessary to conduct a study on education and the philosophy of education in historical periods. In this research, an attempt has been made to express the values of education in each course, not to criticize it. Because this research considers the educational values in each period as an achievement that has been formed based on the geography, civilization, culture, and the will of that period. It was observed by studying educational philosophy in historical periods; The educational values that are important in the era of the collector hunter (the era of the first man) have been declining in the later periods, ie the agricultural period, until the 19th century. It has moved towards the age of primitive man, and in the present age, globalization education demands the full value of the hunter-gatherer values for human beings today.

This research is consistent with the educational study of receiving educational values in the era of globalization with the era of the collector hunter, and according to this agreement, tries to identify the factor that led to the realization of educational values in the age of primates. Expresses globalization in the hunter-gatherer era; The period when all education took place in nature as the bedrock of the first human life. Therefore, the nature bed is an important factor in the realization of educational values during the hunter-gatherer era, so man today needs to refer to and communicate with nature to achieve his educational values.

In the age of globalization, the arrival of technology in cities has caused a change in human life and the lack of daily experience in the natural world has separated the lives of children today from the educational values of today, so the existence of nature in educational spaces for children today. Modeling and educability can be important factors in the reconnection of the child and nature. Child's mind (child) We realized that nature plays an important role in the overall development of the child; And this knowledge of the child emphasizes the necessity of the presence of nature in educational spaces. The presence of nature in the educational space creates indoor space (educational spaces) and outdoor spaces (nature) in the educational place called school.

Dual features (inside and outside) in the architecture of educational spaces require communication, a kind of communication that depends more than anything on the type of interior openings on the one hand and the spatial relationship between the walls on the other. The place and form of these connections are obtained between inside and outside the contradiction that exists like these connections. This means that on the one hand, the interior space must be a space enclosed and closed in front of the outside environment, and on the other hand, there must be a connection between the two spaces. Thus, such a dual relationship between inside and outside makes the child understand his educational values from the educational environment; And be effective in the cognitive, physical, and social development of the child.

Therefore, in the architecture of educational spaces, the relationship between inside and outside with a dual index and having an inherent contrast in space is an important principle, so much so that the designer tries to create a space for communication between inside and outside in the first place. Effectively pulls the outside in and the space is stimulating and fluid, and in the second place, connecting the inside and outside with the space, which enriches and makes this relationship meaningful, and in the third place, by connecting the inside and outside, by blurring the boundaries between These two spaces (combinations) are supposed to draw the outside in. The boundary between inside and outside loses its clarity, and a vague and complex border called infinity is obtained.

The relationship between inside and outside the three solutions of space between, space and borderlessness as a part of school spaces to bring in outside requires complex and non-linear organization because the outer space of "nature" has inherent irregularity inside which is a regular organization. Creates special in-school educational spaces called the order in disorder. This kind of organization is the same organization that exists in nature or the order of the universe, and the order of the universe in the heart of accidents and irregularities. It has a purpose whose end has many moral and spiritual effects on human beings.

Conclusion

According to what has been said, school design in the present age (the age of globalization) creates a borderless educational space through the fundamental connection between the inside (educational space) and outside (nature) in architecture. Nature is expressed. A school that, due to its connection with nature, has connecting spaces, which cause a characteristic in the spaces of this school, which, despite these characteristics in the school space, the school has a distinctive feature.

Acknowledgments: None
Conflict of interests: None
Financial Support: None
Ethical statement: None

References

- [1]. Soleimanzadeh, Sajjad, Habib, Farah, Etesam, Iraj, 2020, Conceptual model of evaluating open architectural space based on the application of Western and Iranian-Islamic perspectives, Quarterly Journal of Islamic Architecture Research, No. 23, Year 7, Summer.
- [2]. Saeedi Kia, Neda, The evolution of Iranian school architecture over time, Architecture, first year, No. 1.
- [3]. Khoshneshin, Zohreh, 2019, Globalization and the need for purposeful education in the field of new educational technologies, 8th year, No. 57, Spring 97.
- [4]. Banyan, Fatemeh, Habibi, Amin, Memarzia, Kazem, Fattahi, Kaveh, 2019, Spatial continuity through open and closed space, two scientific quarterly journals of architectural thought, the second year of the second issue, fall and winter 97, pp. 63- 76.
- [5]. Mirmoradi, Somayeh, 2021, nature-oriented design strategies for elementary school educational spaces to research the objectives of the national curriculum, research in curriculum planning, fifteenth year, the second volume, number 29, pp. 109-131.