



**SOCIAL SUSTAINABILITY ROLE IN THE EDUCATIONAL SPACES QUALITY
IMPROVEMENT**

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ABSTRACT

Social activities and the efficient participation in these activities in order to achieve objectives and the proper accountability towards the problems and the social challenges are the issues which are constantly obsessing human minds and one of the most important needs for human beings is to live in societies. Finding a way for profitable and ever increasing cooperation with ever decreasing troubles has fascinated the human thoughts in every era and has led the humans to finding more novel and more efficient approaches. After the proposition of the sustainable development discussions and its expansion to architecture the architects and the experts of this field came to this conclusion that through the presentation of goal-oriented strategies in the designing process they can improve the social and cohort interactions and functions in the life of the present century humans via designing and fabrication of social and participatory architectural spaces. Of course, this task has been much seen in the past architecture from Iran, Greece, Rome etc. and it can be called some sort of social architecture concept retrieval in the 21st century. For the survey of this subject there has been performed studies in the form of library researches and the data and information have been analyzed in an interpretive and inferential manner and these are eventually supplemented with a few historical studies and field utterances and expressions and the results obtained in the end.

Keywords: sustainable development, social sustainability, educational space quality, architecture, active participation

INTRODUCTION:

Population growth, poverty and disparities, resources abuse, especially nonrenewable ones, has made the majority of the governments and global organizations to think and try to improve the human beings' statuses improvement. In between, struggles for creating resources, methods for widespread hygiene teaching has, to some extent, enabled us to control the crisis confronted with. Following these struggles in the early 1970s the term sustainable development was applied regarding the environment and development. In the years afterwards, this term was expanded to cover a widespread extension and sustainability in other aspects of human-environment and human-human interaction was proposed.

These proposed modern orientations have implications regarding the humans social needs in confrontation with the environment and the society and responding to these needs and securing the required chances for the humans social bonds necessitates the provision of appropriate spaces and the establishment of contexts to which the individuals enter and establish themselves.

The population increasing growth and the urbanization processes specially in the bigger communities and the metropolitans, paying attention to the human-oriented architecture

as a product which should satisfy the human needs in various dimensions has led to the formation of the novel approaches which are known as the social approaches. These approaches along with the sustainable development attitude towards the architecture, with the same sustainable architecture concept, can result in the formation of a novel concept which is called social sustainability in architecture art which has been taken into consideration during the recent years.

Definitions:

1. Sustainable development:

Sustainable development is a comprehensive approach to the sectional improvement of the humans' lives with the purpose of the actualization of the economical, social and environmental welfare of the human habitats. With this meaning, the sustainable development is a process related to the human-environment adjustment and organizations and resources and environment deployment management, obtaining increasing and continuous production, safe life, food security, social justice and stability and it facilitates people's participation. In the process of sustainable development, the social and economical and environmental objectives where possible are blended from

the policies status, undertaking the necessary steps and the protective operations [5].

2. Sustainable architecture:

Sustainable architecture considers humans and the environment simultaneously. In the sustainable architecture the economical, social and cultural aspects are taken into consideration and in fact with such architecture the peripheral nature is amalgamated with our artefacts [8].

3. Sustainable design:

Sustainable design is a type of designing task which is intended to respond to the current needs without damaging and wasting the future generations' resources. In the sustainable designing the social sustainability should be as important as the energy consumption and the buildings and the cities' environmental effect (Lang, 2002) [12].

4. Social sustainability:

Social sustainability has many definitions and we deal with several definitions related to our study subject matter:

Moffalt, 1996: setting the ground for the emergence of the creativities, mobilization of various units of the people with the purpose of "creating a better future for everyone" with an emphasis on welfare, securing the sustainable development objectives and also being assured of the native people and emphasis on their vital role in the

environmental management and development are but some of the premises of the social sustainability.

Sach, 1999: there is a certain definition of social sustainability based on the values and norms such as equality and democracy in it as an effective method for the actualization of the humans' fundamental rights (political, civil, economical, social and cultural) for all of the people.

DFID, 2002: in defining the social sustainability, some of the researchers have referred to four principle and determinative elements: social justice, social affiliation, participation and security. With this definition, indicators such as equal opportunities conjugated with progress for all of the humans, life accompanied with cooperation and contribution for all of the humans in order for them to play their social roles along with earning a safe and secure living in the human habitats against the natural dangers are the social sustainability evaluation premises.

Chiu, 2003: has defined social sustainability in a broad sense as the preservation and improvement of the current and future generations' welfare.

McKenzie, defines social sustainability as the life quality enhancement the formation of which is depended upon the society.

King, 2008: defines the social sustainability as the satisfaction of the humans' fundamental needs, the continuation of the human generation and as a consequence the continuation of the human culture [10].

Education quality:

In the glossary of the educational sciences there have been given numerous definitions for "quality". In Dehkhoda dictionary quality is defined as the conditions and the standards of some things. The quality concept in education is a multidimensional and it is attributed to the change or the variations which are manifested in the students' behaviors. Based on this definition, the only valid measure for quality is the students' changes in the behaviors and in other words learning [1].

Education quality includes 5 fundamental axes:

- a) Learners: as the inputs to the education system
- b) Environment: which should be safe, protective and sensitive to the gender and it has to have sufficient resources and facilities.
- c) Content: which paves the way for obtaining the fundamental skills.
- d) Instructional processes: which assist the teachers in applying the child-

oriented approaches and good management of the class.

- e) Evaluation: which should versatily encourage the learning activities and the reduction of the differences.

The outputs include knowledge, skills and attitudes which are determined based on the national objectives (UNISEF, 2000) [1]

An introduction to the sustainable architecture:

The sustainable development has emerged during the recent decade as a novel paradigm. The sustainability process is a multidimensional stream which meanwhile improving the economical status and the creation of public welfare, is accompanied with social justice and far away from the bioenvironmental and ecological devastative effects and social disorders and meanwhile satisfying the current generation needs it preserves the capacities and the facilities for the satisfaction of the future generation needs according to the conservation and improvement of the environment. For creating a sustainable habitat sustainability not only includes, in its western literature concept, the discussions related to energy, environment, ecology, native technology, pollution reduction, wastages and the redundant material, material recycling and people's participation, in our culture it is also

used in a broader sense to include the human sublimity grounds and a road paver for the human soul sublimity and eminence. Therefore, the view angle subject is proposed according to the interactions between the body and the behaviors, the creation of social sustainability, with heightening the quality of life, securing justice and social supervision, the augmentation of the cooperation spirit, active participation and collectivism in human beings [2].

The prerequisite condition for the environmental sustainability is the establishment of the dynamic equilibrium between the various environmental systems. This condition, from a scientific point of view, requires simultaneous achievement to the ecology system sustainability, sociocultural system and the economical system and it is interpreted as the establishment and the continuation of the synergy relations among all of the environment elements and components (human and nonhuman) from a moral perspective. In a sustainable environment the moderate synergy between the human communities and the natural environment has been established parallel to the simultaneous social and economical enjoyment. Therefore, in such an environment the enjoyment possibility from the naturalistic and enriching

conditions during the passage of time has been provided in the field of environment capacities and for the largest possible spectrum of the people [12].

Sustainable development and architecture which bears the meaning of movement on the human-environment vector and takes the economical facilities development into consideration according to the environmental concerns and social justice has to deal with its re-recognition via shifting its view angle. The sustainable architecture for the continuation of its own field in the process of architecture has to focus on human being and its physique as the main center for the intuition and awareness and it has to exit from the eye-dominance and the visual-oriented culture and besides the visual faculty it has to pay attention to the human intuition in its designing processes. A sustainable architectural work has to be able to satisfy its observers' needs in the first place and it has to help the observers in creating an intuition equilibrium and harmony and , in the second place, it has to help the creation of equilibrium and harmony between the humans and the environment and eventually it has to result in a better quality of life and better social interactions for the citizens and a higher level of economical efficiency which are but some of

the objectives of the social sustainability realization and these set the grounds for the urban sustainable development [12].

Social sustainability:

When the sustainability was first and seriously introduced in the discussions it was mostly about the advanced environmental management but gradually there were other issues entering the field the most challenging of which is perhaps social and institutional sustainability [2]. Social sustainability has been defined as the healthy and fertile life coordinated with nature. In such a definition, the societies' survival and vitality along with the environmental quality and related to the economical systems is in the direction of reaching to the highest level of satisfaction from life [5].

Australian social services council defines social sustainability as: "social sustainability is formed when the formal and informal processes, systems, structures and relations actively protect the current and future generations' capacities and competencies for the creation of healthy and habitable communities." Another definition expresses social sustainability as "the processes for the creation of sustainable localities for the promotion of the social welfare through the understanding of the human needs of life and job." Along with this, one can talk about the

human sustainable development which promotes the current humans capacities without endangering the future generation capacities [3].

In the definition of the social sustainability some of the researchers have referred to four fundamental and determinative elements: social justice, social affiliation, participation and security. In this meaning indicators such as equal opportunities conjugated with progress for all of the humans , a life accompanied with cooperation and contribution, equal opportunities for all of the individuals for playing their social roles along with the secure earning of a living and the human habitats security against natural disasters are the social sustainability evaluation premises. In social sustainability the resources should be deployed in such a manner that the future generations could be given a decision-making option for the satisfaction of their needs with the best satisfaction level. In this definition, the win-win policy has been underscored by the decision-makers for the purpose of achieving economical, social and environmental advancements [5].

The social sustainability is in a close relationship with the human needs and individual and collective behavioral patterns. Thus, plus the contextual sustainability

necessary in the social sustainability space the social sustainability deals with the sustainment of the events qualities enhancement which are happening inside this context. Also, social sustainability discusses about the space in the architecture scale and through the survey of the human needs and behaviors orients the designing process in a manner that relationship between the human beings and the created environment lasts for a long period and this requires the space quality recognition which are defined based on the human needs and they are created via the reflection in the space designs. Therefore, the correspondence between the behavioral and contextual patterns in the space designs is effective on the social sustainability [5].

The sustainable designers know the importance of paying attention to each and every notion. Working in cooperation with the consultant engineers and other experts in the preliminary stages of designing process and also the notions of the local dwellers and the neighbors has to be taken into consideration as well. The sustainable designing process is based on the culture and religion and the ethnic of the people for which it is intended. All of the architectural principles should be visualized in a complete process which results in the creation of a healthy habitat or environment.

Parameters influencing the social sustainability:

a) Social participation:

Participation is in fact a sort of social behavior based on the personal or collective participation beliefs and interests. Participation is thought of as the amount of a system's members involvement in the decision making process. In fact, the participation nature is the group common interests in the society and the individuals' common interests in the group. From the perspective of sociology, participation means the feeling of being belonged to a group and actively and voluntarily participating in it which leads to social activity. Therefore, participation is an organized activity in which the individual voluntarily and intentionally performs an action. Social participation has implications for those social activities through which the society individuals get involved in their neighboring areas or the city affairs directly or indirectly to form a social life. Though getting the people participated in the city affairs and the designing processes, ratifying and implementing the plans and programs not only the adoption of innovative suggestions and a wide spectrum of the capabilities and competencies becomes readily available and the tangible and intangible needs of the

dwellers become clearly determined, but also the social links and the individuals intuitive relations can be enhanced in their life spaces and territories and a dynamic and healthy life can be guaranteed. Sustainable architecture should provide its users with such spaces that encourage them to become socially and environmentally active [2].

b) Security:

In the sustainable designing process security is a vital and the precondition for the process. Security can be guaranteed through various factors in the architectural spaces one of which is the proper designing conformant with the security and preventive principles and criteria. Also, the fabricated environment is also effective on the human behavior and it can encourage the criminal to commit a crime via the creation of a chance for it and on the other hand it can prevent from performing a crime through the proper designing process and the observation of the principles such as the increase in the supervision ability of the habitats on the environment. Along with the executive approaches to architecture some cases have to be taken into consideration the application of which in the designing process and the manufacturing and implementation stages can insure the formation of a safe city and accommodation possibility parallel to the

social sustainability objectives. This objective can be accomplished parallel to the social participation enhancement and along with it. Therefore, supporting of the social activities can be augmented through the creation and designing of the social activities in the locations with the crime potential and the people supervision can be increased in such spaces in order for these areas to become the focus of the people's traffic and they can be changed into an environment for the citizens' social and supervisory interactions [12].

c) Culture:

Culture is one of the important factors in the quality of architectural spaces formation. In a very general definition culture can be considered as the collection of beliefs, opinions, traditions and behavioral patterns and also the knowledge and written and oral literature of a society. The sustainable society design can be culturally defined as "the designing of the spaces which are appropriate containment for accommodating culture, behaviors and human life styles and the life elements which are made up of such factors can last for a longer period of time."

Besides satisfying the human needs in these spaces their rights in controlling the spaces should be taken into consideration. The human behavior in the space is adjusted via

the cultural-social norms and standards. Humans as beings share the environment with the others and this is the norms and the orders which impose limitations on the behaviors in the society. The sustainable designing process meanwhile enhancing the work environments and shelters qualities should not pose any harm to the human comfort which in this way brings about an increase in the productivity and a reduction in the psychological stresses and it will exert a positive effect on the health and comfort of the individuals. The sustainable architecture frees the modern societies' citizens from the grips of deceivers and the abusive consumption advertisers and their constantly increasing exaggerative artificial professional language the chaotic situation of which dims the social realities. The effective factors of psychological comfort include human attention, intimacy, comfort, privacy, connection to the nature, respecting the others' rights and availability (admitting the influence) and in the sustainable designing process these principles are unchangeable issues. The designing should be directed towards an orientation which increases the intuitive experiences which lead to the users' pleasure and enjoyment [10].

d) Spatial fondness and identity:

Despite the territorial effects, architecture is of inherent and dynamic and gradual features which altogether are called identity. Identity bridges us to our past and inherent roots and origin, but based on the daily standards various beliefs are formed which involves our common beliefs with the global architecture. The identity-cultural elements can be those patterns the application and the existence of which creates some sort of fondness and belonging in the design. In other words, these elements can offer clear meanings of the group culture and identity and the constituent society and its users.

The prerequisite for the application of any space in its deep and real meaning is the impressions and the memories. To give meaning to the fundamental things and elements one should have recognition of them and this cannot be possible unless there exists a memory of the things and elements. The place devoid of figurative and pictorial origins will manifest pale identities and it will not be possible to get acquainted with [5].

The social fondness feeling, the individual's sympathy towards a place, which is one of the most significant effects of sustainable development and city life quality key index is a good feeling which is created through the combination of factors related to the spatial

intuition, group memories and the fondness towards a local community. This general feeling which is created in an individual after intuition of and judgment regarding a certain place is called “sense of place” which is an important factor in the coordination between the individual and the environment, brings about a better enjoyment of the place, users’ satisfaction and eventually their fondness in the environment and the presence persistence. Social fondness to a place is influenced by the factors originating from the humans and environment and the extent of the factors effect is variable dependent upon the individual and the environment in which the individual is living. Being fond of a place is interpreted as having roots in the society.

From among the other parameters effective on the social sustainability one can refer to sanity, comfort and welfare, dynamicity and conformance, apparent and physical quality, social coherence, legibility, social interactions, convenience and diversity each of which can be discussed extensively with more details in a specific discussion, but in the course of this study the most important parameters are evaluated with less details [5].

A review of the education and instructional spaces qualities:

A vast part of the human social growth is formed from the childhood period to the

thought maturity in the educational spaces, social institutions which are the representatives of a specific culture and spirituality for various societies. Designing the educational spaces should be corresponding with the social, cognitive and physical functions of the users [6].

Modern perspectives interpret and seek the education and teaching in actions and therefore it tries to fully fill the education environment with the curiosity facilities, tools and motivations, research and probe. Nowadays, this mindset that the educational spaces are enclosed inside the buildings has become obsolete. Educational spaces include the entire open and closed spaces and the entire spaces and elements which is deemed as the dependent educational spaces limit. The spatial quality of the building or the filled space, open space or the yard, the closed space, the contextual orders and the relationships between them are the most important aspects of the educational spaces designing process and they should be designed and implemented qualitatively and attractively and corresponding to the students taste and disposition and set the ground for the students’ active participation and also the close and tangible relationship with the nature in the process of their growth and

perfection, psychological balance and comfort is deemed as necessary [10].

If the educational spaces be flexible in coordination and correspondence to the instructional system their productivity and the learning increase and this is more appropriate from the economy point of view that is to say that the educational and instructional output would justify the expenditures. The flexibility feature has been applied for both educational system and the instruction spaces. Therefore, the instruction space should be of the highest competency for flexibility in order to indicate the highest adjustability with the wishes and wants inside and outside school [6].

Social sustainability inside the educational spaces:

The educational spaces should be flexible places to enable responding to the novel instructional and student-oriented requirements and while performing the main task of instruction they provide spaces for social interactions growth and the identity intuitions in the format of social and pro interactive schools. In fact, flexibility and the community-like school approach the same as what has taken place in the Iranian traditional architecture and education are supplementary to one another and involve the identity history. Social approach and flexibility bring

about an optimum use of energy due to their multi-functionality of the space on the internal and community scales which paves the way for objective cost-effectiveness teaching along with the emphasis on the social growth [6].

John Dewey one of the professionals in the education field believed that the objective of the education regarding the children should conform to solving the problems that the child is confronting with on a daily basis and in the society. He believed that the school should be a simple and rational continuum of the social situations since the school is a social institution before being anything else; he believed that education and culture are the life per se.

Therefore, based on this theory, schools architecture is the effective learning process factor, and perhaps the most important one, and it should interact with the physical and social environment in the periphery and it is only via deep relationship accompanied with experience in the environment that the children's instructional needs are satisfied [7].

The schools are seeking to expand for performing widespread activities at the service of the society in future. In fact, in future those schools more fond of the society are more successful. This saying is an

extension to the Dewey's ideas who believes that "not only do we need democracy in the society but also we need democracy in education." The social schools idea has been somehow presented in the Iranian traditional architecture. In the traditional neighborhoods the school space has not only been limited to the lessons and discussions rather the residents of every city or neighborhood used it in special occasions and dates. The vestry and mosques spaces which belonged to the schools were used besides the clergymen by the neighborhood and city residents and citizens.

What is more pertinent in our schools today is the inconspicuous effective relationship between the schools and the society and the noninvolvement of the school users in the school designs. During the recent years and specially the past decade the researchers have substantially paid attention to the school design oriented towards the social use of the schools and enhancing the school's social function and the schools are recognized as the society center and when the schools recover their influential role the moral values can be expected to heighten; the society members participate more in the school and the lesson and learning classes will be open to the society and the society would be more aware of the school and its role. One of the

other noteworthy issues is the enhancement in the relationship between the society, teachers and the students, the augmentation of the school identity as a social center, providing different age groups with learning opportunity accompanied with one another, the possibility of making use of the students skills in the society and strengthening the students awareness of their immediate community.

Conclusions:

According to the definitions provided herein for the sustainable development and social sustainability and by considering the explications offered for the education space quality generally it can be concluded that the architecture prophesy which has accepted social sustainability as a principle to consider provisions in its design in order for the architecture design to become the possessor of useful and effective spaces which facilitate and establish social participation and interaction and the users are involved in the designing process from the very beginning, their needs are asked and their ideas regarding how the designing process is fulfilled will be sought for. Through putting this process in to practice, not only the users experiences are elicited and it becomes possible to make use of the innovative suggestions but it also becomes possible to

convert the education space into the neighborhood social center and the residents social needs would be considered therein in order for equal opportunities to be available for all of the neighborhood residents and the students in the social environment deployment. In future, schools architecture will be aligned towards this orientation and the people's social needs will guide the architecture towards this direction. Students' participation in the course of designing process will increase their self-confidence and their satisfaction of the education space will be increased. This advancement of the society towards the social schools which has been of a definite and high standpoint in Iranian past architecture will be of a considerable influence along the creation of an identity for future schools. Because paying attention to the cultural, artistic and historical backgrounds of the region is of a great importance because of its immense influence and the formation of an identity is one of the most important points which has to be taken into close consideration in the sustainable designing and the creation of social sustainability quality. Along this course, the creation of collective spaces around the educational space, plus lobbies and the main collective spaces, cause an increase in the social interaction, an increase

in the intimate relationships and the creation of a space for dealing with collective and cohort activities. Designing schools in a flexible manner and with an open plan in such a way that the furniture can be changed or displaced changes schools to a place in which the students feel at home and comfortable and the schools arrangements will shift to a flexible form which will experience comfortable and more friendly arrangement at any time respective to the classes needs and this will be very much effective on the students' learning rate. The school environment has increasingly become friendlier and the collective activities are growing in number. The increase in the collective and participatory activities at schools will be the foundation of positive and influential relationships effective on the social, economical and political activities and eventually guarantees the formation of a healthy and dynamic society.

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