STUDY OF INTERACTIVE LEARNING SPREADS WITHIN EDUCATIONAL ESTABLISHMENTS

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Abstract

Learning takes place in spaces that are not limited to the classroom. It is a process that takes place in every place within the educational facility, starting from the classroom to the corridors, roads, etc. Learning spaces within educational facilities are classified into formal and informal learning spaces. The official learning space: It is the space that is used according to the regular official appointments, and these spaces vary to include classes, lecture halls, laboratories, ceremonies, ... etc. There are several factors that affect the design of formal learning spaces, including: The development in pedagogy: The pedagogy has witnessed a shift towards active learning and cooperative learning, and teaching methods vary according to the need of the scientific subject, which results in arranging the semester according to the method of teaching followed. New students' qualities and habits: Understanding students 'characteristics and habits helps in designing and developing learning spaces. There are five important features for new students that must be taken care of and taken into account, namely: digital, mobile, independence, social, and participatory. Rapid development in educational communication technology: It means all the digital and non-digital devices, means, software, and technological media that are integrated into the education process, and education technologies can be divided into three categories (virtual technologies, installed devices, and mobile devices). The tendency towards the human being at the center of design: through concern for some features and among these features (health) which include: physical comfort - good lighting - acoustics - indoor air quality) motivation (through attention to sensory signals - contact with nature, various shapes of color (adaptation). Via: Flexibility - Sufficient Space - Portable Presentation - Communication with Various Information. Informal learning space is a space inside the educational facility that allows students to practice and discuss academic work without adhering to official dates. The spaces that represent informal learning spaces are varied and include: outdoor space, corridors, lobbies, lounges, café, and library. There are factors that affect the success of informal learning spaces, including: Spreads conform to the needs of the learners. Achieving a balance between society and isolation. Availability of technology and ease of contact with information.

Keywords

Stimulus, Adaptation, Educational Communication Technology, Motivation.

Introduction

A change in design thinking has emerged as a result of an awareness of the environmental impacts associated with modern construction, and their impact on humans and the environment, and from here some new concepts and methods that were not previously familiar in designing and implementing projects, including "sustainable design", have emerged. All of them reflect the growing interest of the urban sectors in economic development issues in light of protecting the environment, reducing energy consumption, optimal utilization of natural resources, and greater reliance on renewable energy sources. With the advancement of science and the spread of technology, technologies, and the human desire to interact with them and acquire them; As technology has become a part of human life that cannot be dispensed with or live without, so

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this technology has been directed in a way that achieves adaptation to human requirements and provides a suitable internal environment, which is known as smart architecture. And because the primary goal in design is the human being, the concept of interactivity arose as a guide to action resulting from the study of behavior. Which is concerned with the human experience as a source of knowledge, and has addressed this social trend of pragmatic philosophy.

1- Social problems such as weariness of leisure, rest and preference for one place over another, as well as psychological and mental illnesses that modern life has generated, hoping to uncover these problems and work to develop appropriate solutions for them. Hence the role of interactive architecture in drawing general lines to see the future in a better way through understanding the situation, studying it and integrating it with technology in order to meet the changing needs of the individual, society and the environment. The internal space means cutting out a part of the empty outer world with special specifications and determinants that make it suitable for a person to practice different life activities in it, and these activities and the manner of their performance depend on the nature of the cut part, its size, its design and its relationship to the external public space surrounding it. Also, each space has a special architectural body by it, the architectural body in physical terms is the internal boundaries that define the internal space. Interactivity is one of the features that distinguishes one space from another, but what is the interactive space and what are its determinants.

Research problem:

The research problem arises in:

1. The need to design internal holdings that adapt to environmental variables and meet changing human needs

2. The need to design interactive learning holdings that are more flexible and more adaptive to the requirements and needs of the individual and society

3. The educational process. These holdings are not limited to formal learning holdings only, but also expand to include informal holdings.

Research importance:

The importance of the research is due to:

1- Study the concept of interactivity and its origins and reach the limitations of the interactive space.

2- Upgrading the internal holdings to achieve the greatest efficiency and flexibility for users of the space.

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Research Aims:

The research aims to reach the concept of interactive space and its determinants. And the changes and circumstances that led to a review of the design of educational facilities. Study the new concept of learning holdings.

Research Hypotheses:

The research is based on the following hypotheses:

The existence of an interactive relationship between the human being and the internal space.

There is a strong link between digital technology and people.

Research Methodology:

The research uses the descriptive and analytical method in extracting the factors forming the interactive spaces.

Interactive space concept:

 - The interactive space is an environment that interacts with the people in it, as these environments touch the activity of people and interact through various displays: audio, visual, kinesthetic and tactile.

 - Interactive space is a combination of real space, and real objects with a) virtual reality (generated by the computer) instead of being produced entirely by the computer as in the virtual reality.

 - The interactive space is an internal space that mutually interacts or responds or adapts to the human being who uses the space, it is a space that has the ability to meet the changing individual, social and environmental needs, and it is also a space characterized by intelligence, flexibility, and adaptation according to the changes occurring on it.

- Informal (interactive) learning spaces: the informal learning space is a space inside the educational facility that allows students to practice and discuss academic work without adhering to the official deadlines, and the spread of these spaces varies according to the type of the educational facility, so schools are limited, for example, to outdoor spaces (outdoor space) , Where outdoor spaces are used for a wide range of play and learning opportunities in order to develop children's abilities and give them new experiences; they practice basic learning processes while sitting, and walking such as observation, examination, meditation, data collection, recording, group participation, discussions in addition to Maintaining children's health as they are exposed to natural air that helps them focus. Colleges and universities have a variety of informal learning spaces, as students spend long periods of their time outside the formal learning spaces (classrooms), so it is important that students spend this time discussing

work. The academic staff is with their colleagues, so these areas vary to include internal and external spheres.

Types of Informal Learning Spaces:

Library:

The library space includes a collection of books, manuscripts, documents, records, periodicals, general references, publications, and other materials that are properly organized, and the library within the educational facility aims to serve the objectives of the educational establishment and community service, and to provide books and references, and other office materials, And allowing its lending and photocopying, as well as the exchange of information by linking the library with other libraries in the world, and establishing exchange and cooperation programs to achieve collective benefit from the resources and books available in these libraries.

Library spreads can be divided into:

Entrance area: The entrance must accommodate a large number of people, and has a security and control area.

Student service areas: It includes an information desk, borrowing offices and photo rooms, and it aims to help students, guide them, and provide them with facilities.

Bookshelves area: Students should be given a larger place, so that they can see the books as they can (absorb traffic).

Reading, learning and study areas: It is the area designated for the student, and includes study cubicles, reading places, places of focus ... and others.

There are several factors that affect the design of formal learning holdings, including:

The development in pedagogy: pedagogy has witnessed a shift towards active learning and cooperative learning, and teaching methods vary according to the need of the scientific material, which results in arranging the semester according to the method of teaching followed.

New students' qualities and habits: Understanding students 'qualities and habits helps in designing and developing learning holdings. There are five important features for new students that must be taken care of and taken into account: digital, mobile, independence, social, and participatory.

Rapid development in educational communication technology: It means all devices, means, software and media

Digital and non-digital technologies that are integrated into the education process. Education technologies can be divided into three categories

They are virtual technologies, installed devices, and mobile devices.

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The trend towards the human being at the center of design: through concern for some features, including health (

These include: physical comfort - good lighting - acoustics - indoor air quality (stimulation (through attention to sensory cues - connection to nature, various shapes of color), adaptation (by flexibility - adequate space - portable display - connection to various information)

- Informal learning space is a space inside the educational facility that allows students to practice and discuss academic work without committing to official deadlines.

The spheres that represent informal learning spaces are varied and include: outdoor space, corridors, lobbies and lounges, café, and library.

There are factors that affect the success of informal learning holdings, including:

o The holdings are compatible with the needs of the learners.

o Achieving a balance between society and isolation.

Motivation.

o Availability of technology and ease of contact with information.

Adaptation.

Results:

It boils down to a number of important points:

1- Educational facilities are affected by changing important factors such as population change, cultural, social, political and environmental change.

And technological change ... etc., and educational buildings have to keep pace with such changes to be more effective.

2- The learning space is one of the most important spheres within the educational establishment and affects positively or negatively on the educational process and on students, as well as lecturers, so attention was paid to that space and was classified into formal and informal learning spaces.

3- Among the factors that affect the success of informal learning spaces, including: compatibility of spaces with the needs of learners, achieving balance between society and isolation, motivation, availability of technology, ease of communication with information, and adaptation.

4- Considering informal learning spaces as an integral part of the educational process.

Recommendations:

The study recommends the following:

1- Developing the design of learning spaces within educational facilities, considering them an integral part of the curriculum, and moving towards dynamic design within the learning space

through the use of moving elements that can be modified, changed, and transformed within the space to be more adaptive to users, and with their requirements, and be able to adapt With modern educational systems, curriculum evolves.

2- Keeping pace with the development occurring in the outside world in terms of materials, technology, techniques, and modern trends in design, and subjecting it to what suits the requirements of the individual and society.

3- The number of students is proportional to the size and nature of the place, so that every student gets his ideal share of space.

4- I recommend to researchers in this field to complete the study, and try to find other design solutions that achieve interactivity and accommodate a larger number of students. I also recommend studying the requirements of faculty members about their needs for the place and knowing the teaching strategies used by them, in order to reach the best design solutions.

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