# The importance of materials in developing creative behavior and technical skills for interior designstudents (executive experimental study)

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### **Introduction:**

Recently, Saudi society has undergone fundamental changes that changed the way of social life and living, and this is a plan that was developed within the 2030 strategy to create a vibrant community and a vibrant environment. As it sets among its priorities the happiness of citizens and residents by working to improve their physical, psychological and social health, to build a society whose members enjoy a healthy lifestyle, and an environment that enables living in a positive and attractive environment. The healthy and balanced pattern is one of the most important elements of the quality of life. Therefore, the Kingdom has tended to expand and take interest in recreational facilities and facilities. Among the most important of these facilities are green spaces, Known as public parks, parks with green trees and flats represent the face and personality of any residential area, where entertainment places are available for young and old, hence the importance of this study by taking advantage of these changes that have occurred in the Saudi society, and by actual participation in the development through the practical training course for students of the third year specializing in interior design, by participating in the design and implementation of some functional and appropriate models for gardens, which are wooden umbrellas as they are considered one of the most important units of garden furniture. Field training during the period of university education is of the utmost importance and is one of the requirements, but one of the conditions for graduation. This experience came to achieve a link between the theoretical aspects that the student studies and the actual executive participation that confirms and consolidates the student's achievement during his studies and raising his creative capabilities that are generated through practice and practical training.

# **Kev words:**

Garden furniture - wooden umbrellas - student participation - experimentation with implementation - creative capabilities - techniques and methods.

# **Research problem:**

- Losing the clear link between the theoretical and practical side through experience and actual practice of developing the student's technical skills.
- There is a deficiency in teaching university courses for interior design specialization by neglecting the training aspect and its lack of its most important requirements, which is training in implementation sites and actual presence in it, to acquire students the technical aspects and learn about the skills and vocabulary of executive specialization in the ground.

## **Research importance:**

• The importance of the research comes by highlighting the need for interaction and complementarity between the theoretical and practical side of the specialization, to get

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acquainted with the technological aspects during the implementation of some types of furniture. Depending on the visits, practical follow-up, and experiencing the implementation atmosphere, with the actual participation of students and passing an applied experience for some of the public garden furniture units.

## Research aim:

Access to the fundamentals and requirements that raise the capabilities of students in the technical side, through follow-up and actual practice in the work environment and implementation. And work to develop creativity skills by solving executive problems as one of the creative thinking skills.

Research limits:

• An experimental executive study for the second year students, specializing in interior design.

## **Research hypothesis:**

• The actual experience and practice during practical training raises the creative capabilities of students and emphasizes the correlation between the theoretical study and executive practice through experience and application.

## **Research Methodology:**

To achieve the research objectives, the research uses the experimental method.

To achieve the executive experience, the research included two aspects:

## First: the theoretical framework: it deals with the following:

The role of educational institutions towards society: The civilized development in all its scientific fields looks for the effective reality in meeting human needs and all scientific and technical aspects, and it has become a priority for the need to link university education to society and contribute to meet its requirements with a more interactive performance. The university is not an educational institution as some people imagine it, but rather it is a knowledge institution that radically changes the location of knowledge in society and contributes to a major fundamental role in serving the community. From this standpoint, the initiative came up with design and implementation ideas to provide models for units of service and aesthetic garden furniture, and to sign them in public parks and urban areas scattered in the cities of the Kingdom. These models are made from treated natural wood and do not require a long time to implement to suit the capabilities of students and their times during participation in the stages of their implementation, and they are easily installable and dismantled, as they have the most important characteristics: design ideas, and technology.

**Experience is a way to develop students 'creativity skills**: Creativity is one of the most important goals that advanced human societies seek to achieve through the stages of education, especially the university stage, as education is required to develop the skills and competencies of students so that they can keep pace with the changes in the current era, and are compatible with the requirements of an ever-changing age, the speed of technical changes necessitates the educational system must prepare individuals who are better able to adapt to changes in the labor market, which is an urgent necessity in our contemporary world.

**Landscaping is an applied art:** The design and coordination of gardens is considered one of the branches of applied arts that work on planning the land and dividing it into symmetrical or natural engineering forms, to coordinate and cultivate it with various plant types, as it sends

itself calm, comfortable, enjoyable and a sense of beauty, the coordination of gardens is not only art, but is art, science and skill, The parks and public parks are considered to be one of the basics of modern city planning, which is being established to be public facilities for cities and residential compounds for a walk and spend leisure times for the residents of these places.

**Design of public garden furniture:** Garden furniture design is one of the most important means for a garden user, which helps him to find amenities, service and beauty, and a successful garden furniture design is the one that expresses its functionality and comprehensiveness to the requirements of users, so it must meet the requirements that are adequate, and reliable. Also, the design of garden furniture must be free from harmful substances in the environment, and it should be simple and not consume large energy in the process of manufacturing and production, as furnishing is the basis of any space that a person uses.

Wooden umbrellas and pergolas are among the most important elements of garden furniture: Wooden furniture units in the garden, such as (umbrellas, pergolas, cubes, and chairs) play a fundamental role in the design configuration of the garden, as they are among the priorities that must be taken into account when designing the garden. Within the appropriate spaces in the garden, so as not to cause any visual obstacle to visitors, but rather makes the visitor feel the expansion even in narrow spaces, and through a conceptual framework consisting of three levels:

"Design Ideas, Techniques and Techniques, User-Friendly Psychological and Physical Needs" **Selection of materials suitable for climatic factors**: Wood is one of the raw materials that have a natural beauty appearance in many shapes and colors, therefore it is necessary to take care of treating it properly to preserve all these characteristics and features against climatic conditions, and treated wood becomes more resistant against weather conditions such as heat and humidity, which are the factors that cause damage to wood. Wood has been chosen as a material that carries many advantages and helps to complete the design implementation easily, as well as it is a natural material suitable for gardens, and climatic factors are among the factors that have a major impact on the design of furniture in gardens, because the gardens are directly exposed to different climatic influences, which It is represented by temperature, solar radiation. **Sweden Wood:** Due to the novelty of the experiment, the choice was made on the pine wood "Sweden", which is one of the woods that is easy to implement for structural shapes and helps in designs of various shapes. This type is characterized by ease of operation.

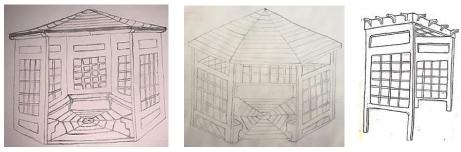
**Wood paints, weatherproof:** It was necessary to protect the wood from moisture, decay, attack of harmful insects, and weather resistance according to the available capabilities, so the appropriate option was to use one of the modern types of paints, which is varied, and proven valid as it has been used for a long time in painting the wood to protect and preserve it.

## Second: experimental and executive procedures (applied experience):

**Project design stage**: This stage started by presenting the project idea to the students to reach an appropriate functional design, and the ideas of the students went beyond and settled on the appropriate ones, then the stage of the amendments was to come up with the final design of the two suitable units for garden furniture.

The stage of preparing proposals: Through which several proposals were submitted by students in the form of simple sketches about umbrellas, all of which revolved around the basic ideas presented to them so that we do not move away from the goal or disperse the ideas, so

most of them express the content that achieves a functional use compatible with the place, environment and users, and students have presented their ideas Which came in the following sketches:



Some suggested ideas by students

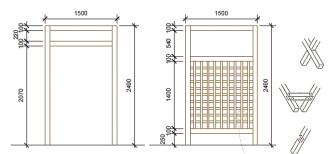


The figure shows the stage of implementation of the mini-model "Maquette" for the hexagonal canopy

The stage of preparing the final and executive drawings: This stage included adjustments to students' drawings with final measurements, as well as preparing executive drawings.



The figure shows the preparation of floor and ceiling drawings



The figure shows the sides and the interlock method used

The preparation and preparation stage of the project: To verify the existence of some observations or problems during implementation, it was necessary to develop scenarios to avoid this:

• Setting the appropriate measurements for the lists and main symptoms forming the structure, in order to achieve the requirements for loading, stability and balance of the unit. The design must achieve air flow to and pass through all corners of the parasols, with the necessity of

showing the aesthetic element of the units to suit their function and location. And stay away from curves to avoid shear areas in wood to ensure durability, ease of operation and implementation, and the technology used in processing (slitting, cutting, wiping, scratching, clicking and tongue, and other simple industry asset operations). Therefore, determine the financial aspect (costs) according to specifications and quantities, including all aspects of implementation. With attention to the methods of finishing with the use of wood preservatives to ensure the safety of treatment and ensuring that the wood is free from any damage, putting in consideration security and safety.

**Stages of implementing the experiment project**: To apply the principle of credibility to determine the extent of confidence from the experiment, the implementation stages were documented with pictures from the beginning to confirm the honesty, consistency and objectivity in the experiment. Where students were moved to Jeddah's industrial area to purchase the necessary wood for the project, then head to some workshops and start implementing the experiment as shown in the pictures.



Stage of purchasing needed wood for project



The figure shows the completion of some of the stages of operation on the scanning and cutting machines and explanation by students

The stage of preparation in the college laboratory: This stage took place through the students, where they learned to use simple tools such as chisel and road tool in order to complete the scratch and then the sanding stage for all parts of the project wood before assembling it.





(Figure 18) shows the stage of scratching and student work in the college laboratory



The figure shows the sides of the parasols after assembling them



The figure shows the installation and assembly of the ceiling unit for the hexagon canopy. A metal assembly unit was created to be installed on both sides "above and below the ceiling beams.



The figure shows the two units of the project after completion

## **Recommendations:**

- Educational institutions should adopt solutions to serve the community, especially with regard to environmental spaces such as parks, gardens and patios, in a manner that is compatible with environmental and climatic data.
- Taking into account the development occurring in the Kingdom of Saudi Arabia by providing an entertaining environment for citizens, and educational institutions must link curricula to new aspirations of society, and take advantage of this by presenting innovative ideas to furnish and beautify the squares provided by the secretariats and municipalities to society.

#### **Results:**

- It has been proven that field visits and practical training are essential to connecting the student to the labor market.
- The experiment yielded multiple results, the most important of which was the acceptance and readiness of students in practice, and they possess the ability to creativity, innovation and design solutions as a result of their continued presence in the workplace. Students also acquired various skills and experiences in specialization as they went through the experience from its beginning to its end.

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