

Implementation of a training hall (gymnasium) at the Faculty of Applied Arts as an Educational Product to Develop the Concept of Entrepreneurship

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Abstract:

Sports companies and institutions have produced a lot of sports devices that work to strengthen muscles to raise the efficiency of players and individuals in order to improve the physical and physical strength of their different types and gender, and to complete a plan to transform the design of experimental models and the first sample in the third year in the Industrial Design Department at Damietta University from a range of preparation of experimental models and simulations for devices and products of industrial design to implement first samples as integrated products in various fields, and this is done in accordance with the concepts of creativity, innovation, entrepreneurship, technology transfer and marketing, including for example, the field of sports equipment.

The research dealt with the field of sports devices as one of the targeted applications for the field of industrial design, and planning to implement and manufacture the first samples of many sports devices required preparing various studies on the design considerations of sports training halls (gymnasium) according to a timeline that allows us to implement many devices that aim to strengthen muscles of different parts of the body in an integrated way.

A team of thirteen students of the Industrial Design Department was directed to prepare studies related to materials and iron sectors, and all the various accessories related to sports equipment available in the Egyptian market.

And where the sports equipment has been carefully studied and identified by the researcher who specializes in physical and sports preparation to coincide and integrate with each other to support all muscles and body parts, therefore we can establish various sporting activities to serve the internal community of the faculty of Applied Arts from students and the teaching staff members and the members working in the administrative apparatus in order to support positive participation and fruitful cooperation among the members of the faculty to achieve a guarantee of the quality of the educational environment in the institution.

The researchers, along with their students have come to design and implement a number of thirteen different sports devices by supporting the Foundation for raw materials and supplies to motivate students and staff members of the faculty to uphold the concepts of creativity and innovation and entrepreneurship with different curricula, in addition to establishing various

sports activities in the gym (gymnasium) designed to serve the internal community of the Faculty of Applied Arts.

Key words:

Entrepreneurship, pioneer student, pioneer course, experimental models, local materials, sports equipment, gyms.

Research problem.

There are many companies that produced for us various types of sports devices that work to develop the physical structure of individuals, but there is an exaggerated rise in the purchasing value of these devices, as the quality of sports devices manufactured for sports centers differs in quality, material and durability, but the types and purposes of them are similar. This issue prompted the intervention of the industrial designer to find alternatives and design solutions to manufacture some of these devices with local materials available at a cost of nearly half, so the research problem can be formulated in the following question:

- Can we manufacture many sports devices with local materials and at a low cost so that they fit as a gymnasium inside the Faculty of Applied Arts so that the integration of those devices is taken into consideration in accordance with the concepts of entrepreneurship?

Research objective.

The importance of research can be formulated as follows:

- The research supports the idea of developing handcraft products and integrating them into the development process to open new horizons for potential entrepreneurs in the Egyptian market, which works to advance development and strengthen the national economy and support local and small industries.
- Developing a course for designing experimental models and the first sample to comply with the scientific and development of society and the surrounding environment in order to maximize the benefit from the handicraft heritage.
- Providing a gymnasium for students of the Faculty of Applied Arts to contribute to the development of the system of student activities through student projects to reduce the burden on the university and the state.
- Spreading the culture of entrepreneurship among our student and establishing the importance of supporting handicrafts that face extinction because of moving away from the correct scientific method, in order to improve the level of income of Egyptian families and advance the economy and develop their social responsibility.
- Increasing society's awareness of the role of the industrial designer through various products, which in turn works to revitalize local industries and break the stagnation of Egyptian society.

Research objective.**The research aims to:**

- Teaching our students planning in accordance with the concepts of entrepreneurship to manufacture many sports devices that fit as a gymnasium for the internal community environment of the Faculty of Applied Arts so that these devices take integration into consideration.

- Complete the course conversion experience from the scope of experimental simulation of industrial design devices and products to manufacture integrated products according to concepts of innovation, entrepreneurship, technology transfer and marketing.
- Students study alternative domestic materials that require design, manufacture, and production of sports equipment in accordance with the concepts of entrepreneurship.

Assumption of research.

The research assumes that design and implementation of a workspace at the Faculty of Applied Arts as a gymnasium as an educational product for students of the third year in the Industrial Design Department - at the Faculty of Applied Arts - Damietta University, in order to complete the transfer of the curriculum to design experimental models and the first sample from the scope of experimental simulation to the application at the production level in order to consolidate the concepts of entrepreneurship .

Search limits.

Time boundaries.

The idea of research is implemented during the academic year 2019/2020.

Spatial boundaries.

The idea of research is implemented on the third year students in the Industrial design department - Faculty of Applied Arts - Damietta University, and they are 13 students.

Preface.

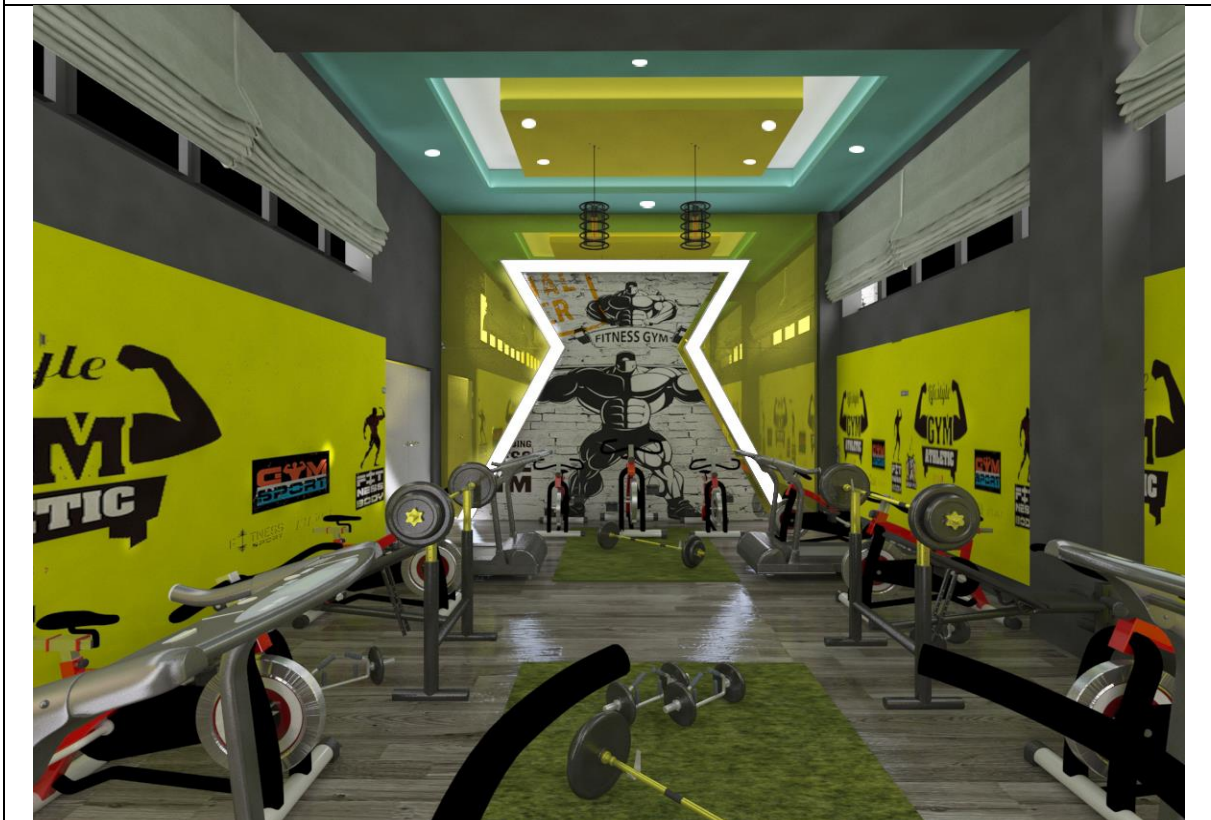
Sports halls have become one of the most widespread facilities and projects in our time in Damietta Governorate, and they also have an important role in the individual's physical, health and mental development, and the training process for different sports, including weightlifting, for example inside the gymnasiums needs to be found in many sports devices and the auxiliary tools for the implementation of modern sports training methods in accordance with modern scientific plans so that the trainer and trainee can develop and implement various formations of exercises in proportion to the targeted motor range.

Sports devices represent the cornerstone of advancing the athletic level and raising the efficiency of the performance of the players and maintaining their safety during practicing sport of weightlifting or different sports that need gymnasiums, and the extent of the impact of this on all parts and muscles of the body, as they are related to the conditions of the environment and society, and are linked to the needs, preparations and capabilities of practitioners providing a wider range for the full range of motion during performance.

The process of implementing the gym equipment for the gymnasium within the faculty of Applied Arts aims to provide students with applied training and to establish the concepts of entrepreneurship for them, in addition to cultivating knowledge and skills and developing new design trends to find alternatives to raw materials from the local environment so that students become more able to invest all their energies and potential self in innovative ways according to an integrated industrial system in a way that allows the Egyptian product to be present during the next stage in the local and international markets. Our students work as potential leaders in the near future, and therefore the most important strategic objectives of the institution and the state is achieved in the development of education system.



A figure showing the first gym proposal



A figure showing the final shape of the gym

Results.

The search results are as follows:

- The ability to design and implement many different sports devices from the local materials available in the Egyptian environment that support entrepreneurial thought for students of the Industrial Design department at the Faculty of Applied Arts in design experimental models course and the first sample within the system of developing experimental models courses in the same department.
- Establishing various sporting activities in the gym designed to serve the internal community of the Faculty of Applied Arts for students, staff faculty members, assistant staff, and workers in the administrative apparatus, which targets positive participation between college members and fruitful cooperation to achieve quality assurance of the institution's education.
- The Foundation's support for entrepreneurial thought in teaching applied courses can result in startups for potential entrepreneurs and increase awareness of student's social responsibility towards the community and the surrounding environment.

Recommendations

The research recommends the following:

- The necessity of adopting the idea of entrepreneurship with the courses and programs of faculties of Applied Arts in Egypt to increase cooperation and interconnection between researchers and academic institutions and the surrounding community, including the various industries.
- Raising students of different cultures and ages to uphold the concepts of creativity, innovation and entrepreneurship in order to advance the local industry and develop the national economy.
- Activating the role of the Office of Technology Transfer and Marketing at Damietta University to document educational outcomes from courses that are taught at the university through entrepreneurial thought.

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