



# Studying the effect of natural and artificial components in the design of external landscapes for educational institutions

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## Abstract

The wheel of life is constantly evolving, and that development has included all areas of life, one of which is the field of education. We see an increasing interest in studying university external landscapes, where university buildings and their external landscapes have witnessed a great development in the process of their planning and design as a result of the development taking place in the fields of education and scientific progress. This led to an increase in the interaction between the categories of the university environment on the one hand and between these categories and the university external landscapes on the other hand by designing these spaces and achieving the aesthetic, functional, and environmental benefits and their positive repercussions on the psychological comfort for the users of those spaces where they represent the open landscapes of the campus environment, which was reflected on the level of learning for students has developed in the main, where they are the largest group among the users of university landscapes. Most of the external landscapes of our universities suffer from a lack of knowledge for the design considerations and foundations that must be provided in the design of the external landscapes of educational institutions. Therefore, there was a need to study the reality of the gardens and external landscapes for the Deanship of Agriculture College, University of Basra, and the departments of college in the new site by analyzing the site environmentally and Architecturally and providing an alternative that meets the criteria and design considerations that meet the needs of the users of the study site, thus achieve integration between the buildings University and its external landscapes. Through the study, the researcher concluded several conclusions, the most important of which is the omission of the criteria and design foundations and non-employing them in designing gardens and external landscapes for the study site. In addition to the lack of a clear vision in achieving the gardens' goals, which was due to neglect, poor planning and management, and the lack of the gardens of the external landscapes for the study site to the complementary components, which helped in this deterioration of the harsh environmental factor that defines the city of Basra, as well as the deterioration of service operations and maintenance of the components of natural and artificial gardens, although they are scarce. Accordingly, the study that was conducted, and after collecting the information from the questionnaire, the data was unloaded into a computer using the "Microsoft Office Excel" program. The results were statistically analyzed using the Statistical Package For Social Sciences (SPSS V.11) using Chi Square function. The results of the study indicated that 35% of the surveyed groups agreed on seeing trees and shrubs in the garden as natural components, and 58% of the respondents preferred that the garden should have highs and lows on its surface. 46% agreed that green areas were intermittently scattered in the garden of the site, and 50% indicated the agreement of the surveyed groups to prefer permanent trees over others, 67% agreed on the diversity of flower colors within the garden of the site, and 38% of them agreed On the necessity of the presence of the water element, especially in the form of fountains. The result of preference was about the type of attraction in the garden, 49% of the surveyed groups agreed on trees, and in the result about the type of trees preferred by garden users, the percentage was 58%. They indicated the necessity of diversifying trees such as ornamental and fruitful because of their visual impact on the garden user.

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