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Research Article

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Evaluation of Green Areas in Faculty Areas

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Abstract Green areas have been a part of our lives from past to present. It will continue in the same way in the future. However, the boundaries of green areas are decreasing over time. Green spaces are of great importance for our spiritual and physical development at all ages. It is important to use green space everywhere in private or public areas in urban or rural areas. Green areas are needed in social activity areas. For this reason, creating green spaces within educational institutions and campus areas will increase the visual quality of the space. Considering the space demands that students need during their academic studies and making designs according to their wishes will positively affect the instructors and students. In this study, the subject of design in campus areas according to the needs of the faculty will be examined. Suggestions will be made according to the questions of what should be considered in landscape design according to the needs of the faculty. In this context, discussions will be made on the landscape work of Niğde Ömer Halisdemir University, Faculty of Communication.

Keywords Faculty, Landscape, Design, University, Green Area.

1. Introduction

The concept of landscape has various meanings. Defining it in the context of achieving sustainable development planning and adaptation goals for climate change is crucial.

Traditionally, landscape is perceived as a scenery and is understood as a visual impression of the aesthetic dimension of the land surface [1, 2,3,4,5].

The development of modern production techniques in agriculture and forestry, the speed and intensity of urbanization and industrialization, the growth of tourism and recreation, increased mobility, and the processes of globalization have significantly accelerated the transformation of landscapes in the 21st century [6,7]. Universities are one of these factors.

The physical environment of university campuses provides a suitable setting for learning and social interaction. These social interactions enhance the presence of student communities and enliven the atmosphere of university campuses. The vibrancy of campus spaces contributes to student engagement and academic success. Universities consist of buildings where teaching, research, and education take place, and at the same time, they have social and cultural activity areas and physical structures. The architectural structures around the grounds and their surroundings create outdoor spaces and green areas. Among the buildings, there are open spaces that function as convergence points for environmental setting. These areas provide a sense of guidance on a campus by bringing together and organizing different spaces and elements; moreover, their attention-grabbing green space designs not only offer an aesthetic environment but also enhance visual quality. Universities form environments consisting of small towns or communities and are places that foster and facilitate social interaction for the majority of the community. Universities make significant contributions to the welfare of society and its



future. The different faculties within universities are areas for professional education. Each Faculty provides distinctive education. For instance, the primary function of the Faculty of Communication is to provide tools and channels to perceive and interpret messages. Communication enables effective social interaction. The main functions of open areas in the Faculty include: firstly, facilitating students' social activities, such as seating, studying/reading, social gatherings, dining, and sports; secondly, providing suitable interior performance requirements for the environmental landscape; and thirdly, facilitating pedestrian and vehicular traffic [8]. Moreover, space is acknowledged as a convergence of social interactions where values, knowledge, appropriate behavioral patterns, and emotions are communicated to others. University campuses resemble urban planning as both encompass buildings, spaces, and pathways. As elements of the physical environment, these components can be distinguished in terms of the functionality of the environment for societal and individual use when considered from the perspective of the structured environment and spatial concept. The quality of a campus is known by the activities occurring within it and the scenes of the spaces.

The aim of this study is to evaluate the criteria given importance in landscape arrangement concerning the needs and demands of students at the Faculty of Communication.

2. Material and Methods

2.1 Material

This study examines the landscape design of the Faculty of Communication at Niğde Ömer Halisdemir University. The considerations taken into account in the landscaping based on the education provided at the faculty were evaluated. The Faculty consists of 572 students, 31 academic staff, and 10 administrative staff. In total, it covers an area of 11,450 m². The green area encompasses approximately 1970m², while the parking lot covers an area of 1600m² (Figure 1).



Figure 1: Niğde Ömer Halisdemir University, Faculty of Communication Area (2018 and 2023)

2.2 Method

Autocad 2010 software was used for creating the landscape project. The landscape design project was implemented around the building of the Faculty of Communication at Niğde Ömer Halisdemir University. The Communication Faculty within the campus area prioritized student needs in the open green area design. The area was associated with four activities that students engage in open green spaces. These activities include providing spaces for group work, sitting on the grass, walking, and finally, arranging reading areas. Parking was planned for the faculty to serve the academics, administrative staff, students, and visitors.

3. Research Findings

Conversations with the faculty members and students of the Faculty of Communication revealed a higher demand for grass and seating areas. In the area design, spacious grassy areas were allocated. To add color to the area, species of Chrysanthemum sp. flowers were used, while Berberis thunbergii was utilized for emphasis. Additionally, low-maintenance species such as Cedrus sp., Abies sp., and Rosmarinus officinalis were chosen. During the construction of two plots in front of the building, a rock garden was created using rocks and was integrated into the parcel area. In the arrangement of the rock garden, species like Pampas grass and Santolina



chamaecyparissus were employed. *Euonymus japonica* and *Ligustrum vulgare* were used on the walking paths. As for the grass, group plantings of *Forstyhia intermedia, Cydonia japonica*, and *Juniperus horizontalis* were implemented. The species of plants used are listed in Table.

Table	1:	Plants	used	are	listed

Trees		Scrub					
Latin Name	Turkish Name	Latin Name	Turkish Name				
Aesculus hippocastanum	At kestanesi	Berberis thunbergii	Kadın tuzluğu				
Abies sp.	Göknar	Euonymus japonica	Taflan				
Catalpa bignonoides	Katalpa	Forstyhia intermedia	Altın Çanak				
Cupressus sempervirens	Selvi	Juniperus horizontalis	Yayılıcı Ardıç				
Fraxinus excelsior	Dişbudak	Pyracantha coccinea	Ateş Dikeni				
Picea sp.	Ladin	Thuja orientalis	Mazı				

The manholes in front of the buildings, being elevated from the ground and unable to be covered, have been left empty and painted in white. The area has been covered with ready-made turf rolls.



Figure 2: Front garden of the building





Figure 3: Landscaping of the front right garden of the Faculty



Figure 4: Placement of seasonal plants



Figure 5: Usage of Rosmarinus officinalis species



Figure 6: The organization of an area created with shaped parcels

The research area, being the Faculty of Communication, is designed to have both active and passive study spaces for students, particularly spacious areas on the grass where brainstorming sessions can take place. Suitable species have been identified considering the climate conditions.

The research has linked the activities of students in open green spaces with area design. The quality of green spaces and areas designed for shading have been evaluated based on their aesthetic and functional qualities.

4. Results

Ultimately, given that green spaces within any campus play a critical role in fostering social interaction and academic communication among students, the quality, distribution, and positioning of these spaces are significant factors to consider. Therefore, greater attention should be paid to the outdoor space designs of educational campuses. Designing university campuses should encompass all student needs. Furthermore, more research is needed on the factors that influence the perception and utilization of open green spaces in various campus design examples. Analyzing social interaction in relation to space utilization will contribute to positively influencing students' mental well-being.

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