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Examining the Hidden Curriculum of the Physical Environment in Higher Education

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Abstract: In this grounded theory study, the hidden curriculum of the physical environment is examined. Hidden curriculum conveys unstated norms, values, and ideas in an educational setting. The physical environment, which carries information about social order, the nature of the learning process, and the roles of teachers and students, is one area covered in literature on hidden curriculum. In this respect, the primary objective was to examine the physical environment as hidden curriculum in university education. Semi-structured interviews were used to gather data in two different ways: Walking interviews and photo-elicitation. 93 undergraduate students from seven different contexts were included in the sample at one public university in Ankara, Türkiye. Using the Nvivo qualitative analysis program, data were analyzed using open, axial, and selective coding within the grounded theory framework. The study identified three key aspects of the physical environment as hidden curriculum: (1) the physical environment's impact on students' socialization, feelings, and ideas regarding field specificity of building; (2) meaning of the physical environment as a symbol of the university, and (3) the physical environment's invisible aspects, which depend on the researchers' backgrounds and ideologies.

Keywords: Grounded theory, hidden curriculum, higher education, physical environment

Yükseköğretimde Fiziksel Çevrenin Örtük Programının İncelenmesi

Öz: Bu gömülü kuram geliştirme çalışmasında, fiziksel çevrenin örtük programı incelenmiştir. Örtük program, bir eğitim ortamında ifade edilmemiş normları, değerleri ve fikirleri aktarır. Fiziksel çevre, örtük programla ilgili alanyazında incelenen bir konudur ve öğrenme sürecinin doğası ve öğretmenlerin ve öğrencilerin rolleri hakkında bilgi taşır. Bu doğrultuda bu çalışmanın amacı üniversite eğitiminde fiziki ortamın örtük programı olarak incelemektir. Yarı yapılandırılmış görüşmeler, iki farklı veri toplama yöntemi kullanılarak gerçekleştirilmiştir: Yürüyerek görüşme ve fotoğraflı tanımlama. Türkiye'de Ankara ilindeki bir devlet üniversitesinde yedi farklı bağlamdan 93 lisans öğrencisi örnekleme dâhil edilmiştir. Nvivo nitel analiz programı kullanılarak veriler, gömülü teori çerçevesinde açık, eksenel ve seçici kodlama kullanılarak analiz edilmiştir. Çalışma, fiziksel ortamın örtük program olarak üç temel boyutunu ortaya çıkarmıştır: (1) fiziksel ortamın öğrencilerin sosyalleşmeleri, duyguları ve binanın alan özgülüğüne

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ilişkin fikirleri üzerindeki etkisi; (2) üniversitenin bir sembolü olarak fiziksel çevrenin anlamı ve (3) fiziksel çevrenin, araştırmacıların geçmişlerine ve ideolojilere bağlı olan görünmez yönleri.

Anahtar Kelimeler: Gömülü kuram oluşturma çalışması, örtük program, yükseköğretim, fiziksel çevre

Introduction

The aim of education as a social institution is to raise healthy and effective individuals who adapt to society. In line with this main purpose, the formal structuring of education takes place through schools. Schools are very important institutions in instilling values, attitudes, norms, and behavior patterns beyond teaching knowledge and skills (Demir & Paykoç, 2006). While official curriculum is used for teaching knowledge and skills, the hidden curriculum is effective in gaining values and attitudes. The concept of the hidden curriculum, first associated with the work of Jackson (1968), refers to informal expectations, implicit values, and norms. The hidden curriculum is named as the 'unstudied, the 'covert' or the 'latent' curriculum, the 'non-academic results of school', 'the by-products of the school', and the 'remnants of the school' (Seddon, 1983; Vallance, 1974). Each of these terms has some understanding and emphasis to explain the phenomenon of hidden curriculum (Seddon, 1983; Vallance, 1974). While some emphasize the outcomes of it; others are concerned with the invisible side that is not explicitly mentioned in the official program. In short, the hidden curriculum is the messages that are conveyed through the social, cultural, organizational, and physical environment of an institution or acquired by the student, which provide students with knowledge, attitudes, norms, values, and beliefs. The reason why the hidden curriculum is called hidden is that the values are not specified in the official programs. In this respect, teacher behaviors, teacher's discourses, school rules, and discourse and visuals in textbooks are considered as hidden curriculum.

The physical environment is another subject that is covered within the scope of the hidden curriculum (Engin-Demir, 2003; Gordon, 1982; Gunio & Fajardo, 2018; Margolis, 2001). The physical environment includes all aspects of the animate and inanimate world, both natural and planned, designed and built, that surround and affect individuals and communities (Moore, 1987). In the 1960s, Environmental Psychology emerged as a sub-field of social psychology, with the understanding that the 'world' is not simple enough to be taken independently of time and space. Environmental Psychology studies 'the interrelationships between the physical environment and human behavior' (Gifford, 2002). In the early periods, Environmental Psychology studies focused on the effects of buildings on behavior (Göregenli, 2015). The increase in school buildings, especially in the USA, and research on alternative school models have encouraged the evaluation of the design and operation of school buildings and classrooms (Rivlin & Weinstein, 1984). While some of the studies in this period focused on the educational consequences of the environmental environment such as heat, light, noise, the size of the school, and ventilation, another part was about the examination of the physical environment in terms of the hidden curriculum. The authors of the hidden curriculum (especially Bowles & Gintis, 1976; Dreeben, 1967; Getzels, 1974) considered the school's social and physical environment as part of the hidden curriculum. Getzels (1974) shows that different classroom arrangements reveal different understandings of the nature of the learner and the learning process (as cited in Gordon, 1982). As Getzels argues, classes “can teach on their own; they tell the child who he should be… and how he should learn” cited in Gordon, 1982, p. 188). Sommer and Becker (1974), on the other hand, emphasized that typical traditional classrooms with straight rows in primary schools are

also common in the university environment and this indicates university student passivity. Similarly, the traditional seating arrangement includes the sit and learn educational philosophy (Schein & Bennis, 1965), the place of the teacher as authority (Jachim & Posner, 1987), the constructed pedagogy (Monahan, 2002), the formal classroom experience (Stolp & Smith, 1995, p. 3) and contradictory with the contemporary philosophy of education (Oblinger, 2006). The seating arrangement of the classrooms within the scope of the hidden curriculum is still an issue that has not lost its validity, has been researched and questioned (eg. Loughlin & Lindberg-Sand, 2022).

In addition to the studies in primary and secondary schools, there have been many studies showing the relationship between learning areas and pedagogy in higher education (Bligh & Elkington, 2019; Graetz & Goliber, 2002; Jamieson, 2003; Jessop et al., 2011; Joint Information Systems Committee, 2006; Oblinger, 2006; Popenici & Brew, 2013; Temple, 2008; Yu et al., 2021). It can be concluded that the physical learning environment is considered as a tool for learning in higher education. According to Cox (2011), the design of a physical space conveys discipline, habits, and implicit values, as well as behavioral rules and role models. Space can convey an unspoken message of silence and disconnection (Oblinger, 2006). Physical environment studies in higher education are common both formal and informal areas (Ellis & Goodyear, 2016) and focus on the design of these environments for the quality and effectiveness of education (Joint Information Systems Committee, 2006; Oblinger, 2006). Again, the physical environment is a subject within the scope of the hidden curriculum in higher education (Gair & Mullings, 2001). Buildings, use of physical space, the physical arrangement of classrooms, and other architectural features "honor specific dates and communicate political agendas" (Gair & Mullins, 2001, p. 27). For example, areas considered outside of classrooms in a building include corridors and passageways. The vehicle that conveys institutional aims, ideas, and pedagogical emphasis in corridors and halls is the walls of the building. The walls of an educational institution are symbolic message of school life (Stolp & Smith, 1995), tools of cultural change (Furtwengle & Micich, 1991), representation of the institution's ideological systems (institutional beliefs and practices) (Castells, 1977; Lefebvre, 1991), informal messages (Popenici & Brew, 2013). Costello (2001) states that a Law School building rich with donation plaques, artwork, and lecture theater socializes students to "adopt role expectations of power and authority, wealth, comfort, and appreciation of upper-class culture" (p. 58), while the Social Work school, which has a more personal decoration with student work exhibits, socializes students "about limited resources and class aspirations and values of empathy, humility, tolerance, public service, and social responsibility (Costello, 2001, pp. 58-59). In addition, according to Popenici and Brew (2013), corridors are places where learning takes place through random encounters by students. In this context, Hillier and Hanson (1984) emphasized that the arrangement of space is related to the arrangement of relations between people. According to Edward and Usher (2000), space is relational; although it is a product of social relations, it produces social relations. Since a learning space itself determines the nature of communication and interaction between students and students, students and instructors, it shapes life and educational outcomes (Van Note Chism, 2006). Again, the separate location of the faculty offices increases the distance between the student and the lecturer, thus reinforcing the image of the lecturer who conveys information (Van Note Chism, 2006).

Another issue addressed in higher education is the campus. The physical features of the campuses convey symbolic messages to those that inhibit or encourage learning (Strange &

Banning, 2001). A space with orientation, accessibility, design, and aesthetic features of a space can contribute to students feeling welcome or alienated (Strange & Banning, 2001). There are also university campus public messages in a competitive market (Barnett, 2000). A campus with fun and functional spaces can represent a university (Barnett, 2000). On the other hand, according to Jessop and Smith (2008), the spatial arrangement of the campus reflects an implicit hierarchy. According to Whisnant (1971), the spatial arrangement of the campus increases interdepartmental competition, causing 'division, tension, alienation and strife' (as cited in Temple, 2008, p. 230). While the buildings in the center of the campus belong to the main disciplines or the administration, the buildings at the borders of the campus are perceived as belonging to outdated disciplines (Jessop & Smith, 2008). The design of the campus and buildings can convey the 'mission of the university ' (Edwards, 2000; Temple, 2008).

There are very few studies examining the importance and role of the physical environment in higher education within the framework of the hidden curriculum. Therefore, this study is important in terms of providing a theoretical framework for better conceptualizing and examining the hidden curriculum of the physical environment and guiding future studies. According to Charmaz (2006), in grounded theory study, it is difficult to start the study with a clearly defined research question, so Charmaz (2020) mentioned the concept of 'guiding interest' that guides the researcher to develop authors' ideas. In this direction, main research question was "what is the hidden curriculum of the physical settings throughout university education of the undergraduate students? Moreover, the concepts of guiding interests were determined after each interview. Some were 'formal and informal normative contexts', 'primary agents of socialization', 'factors that hinder or support students' engagement'. With this research questions and guiding interests, this study provides information about the functions of the university physical environment in the life of university students. Again, this study provides information about how the physical environment of the university should be and which physical features support and symbolize university education. As a result, this study can be an illuminating resource as it offers an educational and user perspective during the arrangement, design, and construction of a university building.

Method

Research Design

This study was designed as a grounded theory study (GT), which is compatible with the purpose of this research. Glaser and Strauss (1967) developed GT "as a reaction against the extreme positivism that had permeated most social research" (Suddaby, 2006, p. 633). In this direction, the use of grounded theory strengthened the aim of the study by examining the obtained data in detail, without depending on the researcher's own hypotheses or prejudices. This grounded theory study aimed to examine and conceptualize the phenomenon of the "hidden curriculum of the physical environment" with an in-depth, comprehensive and different perspective. For this purpose, semi-structured interviews were conducted, and interviews were conducted with two different methods for data diversity: Walking interview and photo elicitation. Walking interview is to explore the participants' daily behaviors, their interactions with the environment, how they use, perceive and evaluate the place. Photo elicitation is useful for exploring the 'visible but implicit culture' of a place (Prosser, 2007, p. 13).

Research Contexts and Participants

This study was carried out at a state university in Türkiye. Dynamic University (DU) was used as pseudonym for real research context. DU was chosen because it is the first university with a single campus in Türkiye and it houses many social, recreation areas and dormitories as well as social and science education buildings. In this way, the possibility of dealing with the case from different aspects has been increased.

Theoretical sampling is a primary characteristic in order to build theory in the grounded theory method (Conlon et. al., 2020). The purpose of theoretical sampling is to reveal all possible categories through sampling (Charmaz, 2006). In this study, theoretical sampling was provided by maximum variation sampling. The age of the building, the number of buildings belonging to a faculty or department, the location of the building on the campus, and the difference in the architectural structure of the building from other buildings were the criteria taken into account in line with the literature (Table 1). As a result, the buildings of Architecture (ARCH), Economics and Administrative Sciences (EAS), Education (EDU), Electrical and Electronics Engineering (EEE), Geological Engineering (GEO), Industrial Engineering (IE), and Physics Departments and Faculties formed the spaces of this study.

Table 1

Information about sample buildings

	Number of department	Year	Number of students	Distance from campus center	Design
MIM	3	1963	841	Close	Different
EDU- A	4	1992	838	Far	Ordinary
EDU- B	1	1999	479	Far	Ordinary
EDU- C	1	2003	228	Far	Ordinary
EEE	1	1964	1089	Close	Ordinary
FEAS- A	2	1967	243	Close	Different
FEAS- B	2	2000	174	Far	Different
GEO	1	1971	301	Far	Ordinary
IE	1	1996	435	Center	Different
PHYSIC	1	1965	443	Center	Different

The study was carried out with university students who use the buildings indicated in Table 1 in order to examine the "lived experiences and the meanings arising from these experiences" (Seidman, 2006, p. 9) of university students who actively use university buildings and spend time on the campus. While selecting the participants, diversity was ensured by paying attention to age, gender, grade level, and department criteria (Table 2). In addition, if there are many buildings belonging to a faculty, the user of each building was tried to be reached (Table 2). 24 students from EDU, 12 from ARCH, 10 from IE, 9 from EEE, 12 from GEO and 6 from Physics department participated in the study. 62 students were interviewed by walking interview, and 31 students were interviewed by photo identification.

Table 2

Participants

	1st class		2. class		3rd class		4th class		Total
	WI	PE	WI	PE	WI	PE	WI	PE	WI/PE
ARCH	4	3	1		2	3	3		16
EDU- A	1	1		1	4*		3	1	11
EDU- B	2	1	1	2		1	2		9
EDU- C	1	1					2		4
EEE	1		2		2	1	3	1	10
FEAS- A	1		5	1	2		1		10
FEAS- B			2	1			1	2	6
GEO	1	1	2	1	3		2	2	12
IE			2		2	2	2	2	10
PHYSIC				2	2*		1	1	6
Total	11	7	15	8	17	7	20	9	94

*A student in the faculty of education participated in the interview by walking around the building of the Physics department.
WI: Walking Interview, PE: Photo-elicitation.

Data Collection Tools

Interview form developed by researchers was used in this study. After the interview form was developed considering the literature, three experts working in the Department of Educational Sciences were consulted for the validation of the interview form. In addition, pilot interviews were conducted with three students in order to determine whether the questions were understood or not. Interview form included questions to obtain information about university students' opinions, experiences, and evaluations about places, their first impressions and feelings about the particular place, the purpose and frequency of using the places, and functions of the places.

Data Collection Procedure

All interviews were conducted in the academic buildings used by the participants. During the walking interview, the participants determined the walking route. For the photo identification interview, the participants brought the photos they took in the places freely before the interview in line with the purposes of this research. After the walking and photo-elicitation interviews were over, the interviews continued with the pre-prepared interview questions. The interviews lasted an average of 60 minutes.

Data Analysis

Three analysis stages of the embedded theory method were followed in data analysis: (1) open, (2) axis, and (3) selective coding (Böhm, 2004; Corbin & Holt, 2004; Holt & Dunn, 2010; Strauss & Corbin, 1990). In addition, the continuous comparison method (Glaser & Strauss, 1967) was used to discover similarities and differences between cases. In addition, the researcher took notes to follow up all the codes, categories, and themes that developed from the analytical process, the relationships between them, and the questions she produced during the data

collection process. Also, using the QSR Nvivo 10 qualitative data analysis software helped organize the data in the coding and categorization process.

Trustworthiness

In qualitative research, reliability is explained by four concepts: Credibility, transferability, consistency, and confirmability (Yıldırım & Şimşek, 2021). First, data diversity was used for credibility, and depth-oriented data were collected. Secondly, it was ensured that the buildings were selected for transferability in accordance with the criteria determined by examining the literature and the whole process of the study was described in detail. Third, the researcher worked to establish the consistency of all data and its relations with the results by making a comparative analysis during the coding process of the data. Finally, to ensure confirmability, the researcher took notes on the rationale for the decisions taken during the study and the implementation process. In addition, abbreviations were used in the study to increase readability: Architecture (ARCH), Economics and Administrative Sciences (EAS), Education (EDU), Electrical and Electronics Engineering (EE), Geological Engineering (GEO), Industrial Engineering (IE) and Physics Department. For example, if there is the phrase ARCH students in the text, it should be considered as a student of the Faculty of Architecture.

Ethical Consideration

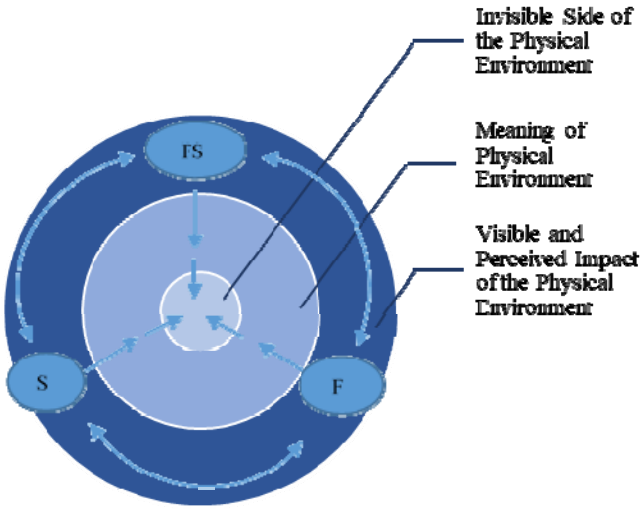
Ethics committee approval was obtained for the study and all participants voluntarily participated. Moreover, the nickname Dynamic University (DU) is used instead of the name of the university to draw the attention of the readers to the results rather than the institution itself.

Findings: Conceptualizing the Physical Environment as a Hidden Curriculum

This study presents a theoretical proposition that conceptualizes the university physical environment as a hidden curriculum: 'Visible and perceived impact of the physical environment', 'meaning of the physical environment', and ‘invisible side of the physical environment' (Figure 1).

Figure 1

Conceptualizing the hidden curriculum of the physical environment



S: Socialization, F: Feeling, and FS: Field Specificity

Visible and Perceived Impact of the Physical Environment

This section explains university students' direct comments on the physical environment of the building and campus. Students' comments on physical environment were handled in three ways: 1) Impact of the physical environment on the socialization of the students, 2) Impact of the physical environment on the students' thoughts about whether the building is field-specific or not, 3) Impact of the physical environment on the students' feelings.

Impact of Physical Environment on Students' Socialization

According to university students, university life means more than classes and it starts after classes. Socialization is one of the prominent elements of being a university student. Therefore, physical features that increase socialization in university life are explained.

Providing a Place and/or Space. In this study, students' comments on socialization increase in buildings that provide space and place for students' use. It can be said that the most important element to increase the socialization of students is to provide students with certain spaces for certain purposes. The mere existence of the space can initiate and increase student activity and thus contribute to the socialization of students. These spaces can be a quiet study, an open workspace, an atrium, a club room, a canteen, a cafe, a furnished hallway or just a corner with a bench. In short, this place can be any space that students use to meet any of their needs. Buildings that have places with a function are named as living places because they increase the use of students. In addition, these academic buildings (ARCH, EAS, IE and Physics) support a wide range of activities that bring students together to exchange ideas and knowledge and engage in friendships. On the contrary, in buildings where most of the students' needs are not met (GEOE, EEE, and EDU), students have difficulties in socializing with their peers. On the other hand, the spaces provided to students can be small or large, well-designed or not, and well-

maintained or neglected. It is better to have a place where socialization activities are carried out, even if it has adverse physical conditions, than not to have it.

In this study, although the academic buildings are at different levels in terms of allowing socialization, the university campus is considered as a place designed to meet the social needs by all students. Students' satisfaction with the physical environment of the campus is high. The campus environment offers public spaces for students from different socioeconomic levels or different characteristics, provides sports facilities for different sports branches, and contains suitable venues for many activities. Students list the places and places that contribute to their socialization as follows: Alley, Stadium, particular lawn areas, Central Library, well-known cafes, common open spaces, and sports facilities.

Buildings Meet Many Different Needs. An academic building that combines many different activities has the possibility to increase student interaction and connections. According to the students, a building has social functioning when it offers the most appropriate different areas of usage, freedom of mobility, and comfort for the desired activities. If an academic building has informal spaces and facilities that meet the various needs of students in addition to the main and official spaces, students will use the building more. These facilities could include lockers, a copy center, and office supplies. Students' lives are made simpler by these opportunities, which also keep them from spending their time and energy traveling to other locations. The students stressed that living in such a building makes it easy for them because they do not need to leave it. Keeping students together, then, is a benefit to the social life of a building. Additionally, these facilities make sure that students from different faculties can use the building.

If an academic building is open to all students in the campus for different purposes (for example, if it has classrooms for courses taken by all university students, large lecture halls used for social and academic activities, student community rooms where students from different disciplines can become members, popular canteens), these opportunities will ensure that the building is recognized and visited. Therefore, academic buildings that provide various purposes and uses have a high potential for social activities.

Major changes are not necessary to support socialization; however, a simple touch to the environment has the power to increase students' academic and social activities in that environment. For example, any chair or table in the corridor gains a function limited to the imagination of the students. Again, the presence of table tennis in the hallway allows students to take a sportive action outside of classes. In addition, the placement of scattered sitting and study furniture in the corridors allows students to gather for different purposes and engage in an informal activity. Flexible use and useful spaces affect the communication and relations between students positively.

Being Visible and/or Accessible. The easy accessibility of the building on the campus can increase the use of space and thus communication. In terms of building design, students using in an atrium-type building were satisfied with the student life in the building. In this type of building, a student's observation of individuals' actions and behaviors in areas makes students feel that there is a lively life in the buildings. Students can perform many activities such as reading a book, working on a project, and making models in the functional open area in the atrium-style ARCH building. In addition, this area becomes a recreation area that students use to

rest, sit, eat, and chat. Apart from these, students also stated other functions of the atrium. They are a performance space used for juggling, playing hopscotch, and skateboarding.

Impact of Physical Environment on Students' Ideas Concerning Field Specificity

Field specificity describes how an academic building represents the discipline taught in that building and whether there is a department-environment fit. Department-environment fit also shows the level of meeting the educational needs of students. This section is covered in three subsections: Physical products, learning spaces, and the building itself.

Physical Products. Products are defined as physical objects created and used by humans. Products have a role that allows the student to discover their departments. The fact that an academic building contains products representing which department it belongs to is an indication that that building is compatible with its academic mission. The products inform students about the relevant topics of their discipline before they start school and increase their readiness. They also embody knowledge during their education.

Models made by students in the ARCH building are exhibited at regular intervals and their posters are hung on the boards in the atrium. Besides these, the corridors are decorated with beautiful works of art and architectural elements. The fact that the students entering this building have many products that can get an impression of the profession enables them to have positive feelings about the building and places. Beyond that, examining these works of art and architectural elements during their education, and the fact that these works are among the subjects of some of their homework, constitute an important place in the learning of the students.

Another academic building with many products is the GEO building on campus. The GEO building consists of different types of maps (topography and physical, etc.), timeline, and poster related to the departments. Like the ARCH building, this building also raises awareness of the discipline of Geology to students from the first days of their education. The products become more meaningful objects when the information in/about these products are taught in the lessons. For example, meeting in front of a map before going on a field trip and learning the details of the field trip through the map makes it easier for them to assimilate their knowledge of Geology.

The most functional products in the IE building are the boards in the entrance hall. When students enter this building, the first stimulus they see is the boards on which the final-year students' graduation project posters are hung. This first encounter, which is an orientation at the university, enables students to realize that they are going to do a big project in their education life and to start the next years ready.

If there are materials made by students in a building, these materials were definitely noticed by the students and mentioned in the interviews.

Learning Spaces. There are certain spaces associated with departments in academic buildings. Laboratories in the engineering buildings, research centers in the EEE buildings, the museum in the GEO building, studios in the ARCH building, group study rooms in the IE building, and reading rooms in the EAS buildings were the places where comments were made about the department.

The educational needs of university students vary from department to department. The educational needs of students, such as group work, individual work, and experiments in the laboratory, differ from department to department. Working in groups, having group discussions,

and exchanging ideas are the common needs of students in all departments. At this point, IE and EAS A and B buildings meet this need of their students. In EAS A and B buildings, there is a library designed in accordance with the departments of the students, a quiet study room, and open study areas. Likewise, there are sound and silent study rooms and computer laboratories in IE buildings. Some of the IE students stated that the lecturers stated that group work is important for their professional development and that these spaces were designed for this reason. On the other hand, some buildings do not have places to meet the educational needs of university students, and in some buildings, the use of existing spaces by students is restricted. In both cases, it was stated by the participants that student needs were not met.

In summary, if the academic buildings meet the educational needs of the students related to their academic responsibilities (doing homework, participating in group work, preparing for the lesson and studying for individual and peer exams), if the academic buildings consist of learning spaces suitable for their own disciplines and these spaces are open to student use, that building is field-specific for students.

The Building Itself. The products inside the building itself express its architectural features other than human characteristics and social life. In this respect, the building itself is characterized as an indicator of the department. ARCH building and EAS-B block are two examples that are considered as “representing the department” by students.

The ARCH building has a structure that arouses interest in the area and encourages artistic activity, due to its extraordinary design, large courtyard, large windows, and fully equipped studios. People who enter the ARCH building for the first time can easily guess that the building belongs to the field of architecture, whether they read this section or not. The students who visited the building before choosing a department stated that they gained important clues about architecture, decor and design, and their career choices. The ARCH building is a field-specific building not only for the students of the department taught in that building but also for most students studying in other departments.

In the EAS-B block (Business building with general use by students), students get clues about the department. The students said that this building is the biggest, widest, high ceiling, white color, and luxurious design in campus and it is different and reflects a part related to money. Like the ARCH building, the definition of building specific to that area for the EAS B block was expressed by the students studying in other departments.

Buildings other than this were not mentioned as specific to the department with their architectural design features.

Impact of Physical Environment on Students’ Feelings

The fact that a building has qualities that increase student socialization and is specific to the field ensures that students have positive feelings about that building. In addition, all the physical features that increase the student's use of the building and socialization increase the sense of belonging of the students. In this section, the factors other than features mentioned above that affect students' satisfaction and feelings are explained. These factors are; natural environment, aesthetic quality, entrance hall, ambient environment, location, and freedom of use of space.

Natural Environment. The fact that the campus is intertwined with greenery and trees is a factor that significantly affects student feelings. The natural environment of the campus is at the

center of student perceptions. Almost all of the students who visited the campus during the decision department stated that they liked the natural environment of the campus and that this was a factor affecting their choices. The fact that the cities where some students lived before university life do not have as much green areas and trees as the DU campus causes these features to be more prominent and pleasing for students. In addition, the fact that there are too many asphalt roads, high-rise buildings, large shopping centers and heavy traffic in the city, and that the campus is not similar to the city in terms of natural environment, causes these negative aspects to not be felt by the students.

A green campus is ideal for both individual and group use by students. Wide grass areas have been mentioned as area where students stay alone, as well as being a socializing area for students. The tree-lined paths are an important place for students to relax by taking a walk after busy classes or boring days. For students, the campus atmosphere is private, friendly, and attractive. Due to these distinctive features of the campus, university students stated that they felt lucky and important.

In addition to the natural environment in the campus, it has been observed that the comments of the students about the buildings that are intertwined with nature have increased. For example, there are open inner courtyards in the IE and ARCH buildings, and green areas with furniture independent from the canteen in the outer spaces of the GEO, EAS, and EDU buildings. These courtyards and outdoor spaces are places that students gladly talk about. It is important for students who have to work in noisy and crowded places to have an environment with natural elements that they can use whenever they want. While these spaces meet the need for rest, they also positively affect the well-being of the students.

Aesthetic Quality. One of the factors that raises students' perception of privilege is aesthetic quality. If a building is considered a beautiful construction both visually and architecturally, it will appeal to the feelings and emotions of the pupils. This research found that buildings with unique designs that students have never seen before are one of the most crucial factors in evaluating the aesthetic and architectural quality of that building. Evaluating the aesthetic and architectural quality of any building is not the focus of this study. The students in this study mentioned two structures of aesthetic value. These structures are ARCH and IE structures. The atrium between these two buildings is made up of open areas with multiple stories. The atrium provides a visual link between activities inside. Moreover, the atrium design in the IE building has a glass ceiling that allows natural light to flow, while the ARCH building has large windows. Thus, students get the chance to stay connected to life both inside and outside the building. In addition, wide corridors that provide ease of movement have positive psychological effects that make people feel more spacious and comfortable.

Entrance Hall. If a building has a beautiful entrance hall, students feel good and motivated when entering the building. In this study, there are two entrance halls that activate positive emotions. The long corridor entrances of the ARCH and EE buildings were mentioned as the places that students liked. Some students stated that these long corridors prepared them for entering the lesson. The entrance of the ARCH building is mentioned not only by the students using that building but also by the students studying in other departments. It is an expected result that the entrance of the ARCH building is evaluated positively, but EEE students mostly have positive feelings about the building entrances although they complain about the physical

characteristics of their academic buildings. EEE students also stated that they felt good and privileged when entering the building.

Ambient Conditions. The qualities of the environment are another aspect that determines whether a building is beautiful or not. The ambient environment is connected to elements of the environment like light, sound, and maintenance. It causes university students to feel less valuable in a neglected building and to be less willing to use the building. Students prefer a clean and well-kept learning environment. In addition, the ambient conditions are elements that change the atmosphere of the environment and contributes to the well-being of the users. The students feel comfortable in the learning environment when there is enough light, a reasonable amount of noise, and fresh air. Some of the students stated that neglected buildings negatively affected their participation in the lesson, their active listening to the lesson and reduced their motivation to participate in social activities. The neglect of an academic building causes students to think that the university administration does not care about them.

Location. The location of the academic building on campus also has an impact on students' feelings. The majority of the students have favorable opinions of the campus's physical environment; however, others are not satisfied where their academic buildings are located. The students claimed that if the academic buildings are far away, they do not feel attached to the campus' social life. Students also believe that their disciplines are not given enough weight if their academic buildings are far from the center. All EDU students who took part in the study specifically stressed that they felt outside of university life and that this situation did not satisfy them because of the distance between their academic buildings and the campus center. However, despite the GEO building's distance from the campus's center, the GEO students did not voice their complaints as loudly as the EDU students did. The distribution of buildings and pedestrian access are likely responsible for this variation. Some GEO students prefer wandering through the trees along the distance between their residence halls and the campus center. In addition, the presence of other academic buildings surrounding the GEO building reduces the feeling of isolation among students. However, the absence of academic buildings belonging to different departments around EDU buildings increases the negative situation of EDU students due to the location.

Freedom of Use of Space. Another feeling emphasized by the students is freedom. There are four elements that give a sense of freedom in the use of a place: Free use, accessibility, non-interference with student behavior, and comfort.

Free Use. Students stated that having spaces where they can use and socialize for a long time without spending money gives them a feeling of freedom. In this respect, it is important that a canteen or cafe belonging to a business is open to student use even if products are not purchased. In short, students want to be economically comfortable.

Accessibility. The students stated that they should be able to use the spaces and facilities when they need it. In a building where the study room is not enough, the classrooms are locked, the laboratories are allocated insufficient time for homework, the students are not satisfied. Locked doors or restricted places mean that the place is not a student place. On the other hand, 24/7 open spaces, study rooms, and libraries create a sense of freedom for students. In short, students want to be comfortable in terms of time and duration of use of the space.

Lack of Factors Interfering in Their Behavior. Spaces that do not interfere with student behavior contribute to sense of freedom. The existence of places where one can sing freely, play instruments, and relax makes students feel free. In short, students want to be free in their actions.

Comfort. Students stated that it is important to feel comfortable and safe while using any space. For example, the freedom to sit at a stranger's table makes them feel comfortable when there is no place to sit in the place. In short, students prefer places where they are psychologically comfortable.

In summary, students prefer a campus to have spaces that offer economic freedom, flexible time, free actions, and psychological comfort. These elements enable students to feel freedom. There are many places on campus where students feel free and behave freely. Examples of these places are well-known canteens and cafes, stadium, and green open areas.

Meaning of Physical Environment

"Meaning refers to each person's integration and interpretation of the stimulus information that arrives" (Gifford, 2002, p. 7). The meanings that individuals attribute to a place form the basis of their experiences with the environment and express what a place really means to people who spend time there. Meaning can be positive or negative and differs from person to person. In this study, the meaning of the physical environment of the university was directly revealed by the discourses of the participants and the inferences and interpretations of the researchers obtained from the data. In this study, the meanings of the campus physical environment are focused on the concept of the university. In this section, 'What is a university?' question was tried to be answered through the physical environment. The architecture of the academic building, lecture halls, multi-purpose buildings, and student-centered campus are the indicators that represent the university.

Architecture of the Academic Building

The size, appearance, and architectural quality of an academic building is the main determinants of whether that building is a university building. An academic building must be larger than any previous school that students have attended. The building should have a more interesting and different design, and an attractive appearance that students have not seen before.

Lecture Hall

Lecture hall in this context have a very large capacity and can hold more than 200 students. Some students made it clear that the lecture hall represented the concept of university. The traditional lecture is generally used in large lecture halls. Traditional lecture makes students passive listeners. Rather than this result caused by large lecture halls, in this study, participants evaluate lecture halls as an indicator of being a university student. In addition, during the interviews, comments were made about the comfort of the lecture hall in many respects. For example, the fact that some lecture halls have two doors (one close to the teacher's place and/or the blackboard, and the other above) and that a student who is late for class can enter the lecture hall through the upper door without any interference, offers comfort to the university student. In addition, the large number of students using the lecture halls causes the instructor to not be able to make eye contact with each student and not to notice or ignore the undesirable student behaviors such as messaging and sleeping. This situation ensures that students are pleased to attend the course in the lecture hall. In addition, since teaching in the lecture hall is not based on asking questions to the person chosen by the instructor, students still feel comfortable. Some

students stated that they like to get lost in the lecture hall. In other words, students prefer a learning environment in which they take the responsibilities of discipline and studentship, and act more independently, freely and comfortably. In short, lecture halls represent the understanding that 'learning at the university is personal and dependent' and that 'the student can learn if he/she wants'. Moreover, lecture halls are spaces used by students from different departments within the both university-wide courses and extracurricular programs. In this direction, lecture halls are places that represent the university, as they allow students with different characteristics to come together and socialize. Beyond these, lecture halls symbolize the university environment with movies and TV series, so before university education, the lecture hall was established in the minds of students as a university teaching area.

Multi-Purpose Building

This study revealed that an academic building designed only for courses does not identify with the concept of a university. An ideal university building should provide an informal environment where students take time for their academic and social activities, share their knowledge and experiences with their friends, and work together. University students gain experience through peer communication and interaction, where they learn and notice the perspective of their friends.

Single Campus

DU is defined by students as 'living space' and 'student-centered' as it is located in a single campus with ample facilities that meet the vital and social needs of students. A single-campus university is an incentive for an affluent university life, whether students live on campus or not. Students stated that university life is not just about studying. They emphasized that it is more important to participate in any activity and socialize in university life. The expression “No need to go out” is a phrase used frequently and gladly by students, as the campus consists of many facilities in addition to its academic buildings, these facilities meet the different needs of students such as working, resting, having fun, and socializing, and the facilities are easily accessible. This feature of the campus is also interpreted by the students as: 'Don't leave the campus, focus on the lessons.'

Student-Centered Campus and Building

Whether an academic building, campus, or places in the campus are student-centered or not strengthens or weakens the students' concept of university. DU has academic buildings that are considered student-centered (ARCH, EAS-A, EAS-B, IE, Physics) as well as non-student-centered buildings (EEE, EDU, GEO). The reasons for this classification are explained in the section titled 'visible and perceived impact of the physical environment'. In addition, the campus is defined by all students as student-centered. However, the use of the facilities of the campus varies according to the location of the academic building, student characteristics, and the location of the dormitories.

Freedom is at the center of the concept of “university”, so students' limited access to places contradicts the concept of university. The restrictions that are not preferred by the students can be listed as follows: The computer laboratory of a particular department is not open to other departments’ students, the central library is closed at night, and places (e.g. study room, reading room, classroom, laboratories) are only allowed to be used during working hours and for an insufficient amount of time. Although students have rationally justified the reasons for keeping

these spaces locked, they expect to be given permission to use them according to their needs. The needs of the students are especially educational needs, and it is perceived as a big problem that the participants' own department buildings cannot meet these educational needs. Therefore, these restrictions should be removed for a student-centered, accessible university.

The Invisible Side of the Physical Environment

The final dimension is the hidden and invisible side of the hidden curriculum. The name of this dimension was called 'invisible' because it emphasized the points that the students did not mention much, rather than the comments of the students about the physical environment. The main reason for this is explained in the literature of the hidden curriculum. According to Seddon (1983), there are degrees of hiddenness as the relative nature of the word hidden, and their degrees arise from different levels of awareness of any phenomenon. He also argued that the hidden curriculum is not known by everyone, and that the person who knows can use his gains to reach a particular result. Therefore, hidden curriculum researchers need to interpret the views of those affected by the hidden curriculum. Moreover, Vallance (1974) noted that the hidden curriculum as perceived by a researcher includes varying degrees of purposiveness and depth of 'hiddenness'. The degree of hiddenness depends on the researcher's discipline, political orientation, research orientation, and the researcher's ability. The interpretation of the hidden curriculum varies, as a sociologist or psychologist examines the findings of the same study differently. Therefore, the degrees of hiddenness of the hidden curriculum may differ from one researcher to another. In higher education, the hidden curriculum of the physical environment is associated with the mission of the university (Chapman, 2006; Edwards, 2000; Gair & Mullins, 2001; Jessop & Smith 2008; Kenney, et al., 2005). "The campus mirrors the issues that an institution faces" (Kenney et al., 2005, p. 4), "the institutional story is told through the campus…. The campus is an unalloyed account of what the institution is all about" (Chapman, 2006, xxiii), "[t]he way in which you structure an institution tells you about the desires and agendas of that institution (Blumenfeld-Jones)" (cited in Gair & Mullins, 2001, p. 27) are some of these associations. In line with this, this study researchers suggest that there is a relationship between the physical environment and the university mission and explained this relationship. However, because the length of the paper is limited, this interpretation was not be placed in this paper.

Discussion, Conclusion and Suggestions

The aim of this study was to propose a theoretical framework for the better conceptualization and analysis of the hidden curriculum of the physical environment and to pioneer future studies. For this reason, in the discussion part of the study, the hidden curriculum of the physical environment was examined within the framework of important questions in line with the findings of the study.

What Do Students Actually Learn from the Physical Hidden Curriculum?

In this study, it was seen that undergraduate students evaluated the physical environment within the framework of their socialization, educational needs, and effects on their feelings. Among these, the effect that students often and mostly focus about is related to their socialization, and therefore it can be said that the physical environment is one of the most important tools of socialization in higher education. Weidman (1989) defines undergraduate students' socialization as a process resulting from their interaction with members of the university community in groups or other characterized environment. According to Bickford and Wright (2006), creating a learning space also means building a community. In this context, well-designed

spaces provide users with the opportunity to act in certain ways and enable activities to take place (Bennet, 2007). Similarly, as seen in this study, a designed space increases or decreases students' social activities and thus determines students' feelings and perspectives towards the discipline they study. From these direct and obvious results, it can be concluded that the physical environment also helps in the formation of professional identity. Altimare and Sheridan (2016) concluded that extra-classroom spaces play a role in university students' community formation and identity. Professional socialization, which is considered within the scope of socialization, is about a professional role at university and the initial preparation to acquire the knowledge, skills, and tendencies necessary to achieve this role (Crow, 2006). According to McKinney et al. (1998), professional socialization includes supporting students' versatile academic experience and learning, and providing knowledge and skills related to the sociological structure offered by university education. In this understanding, the physical environment is an important element in building people's social interaction (Graetz & Goliber, 2002) and demonstrating overt and hidden social, cultural, and behavioral expectations for their future occupations. In addition to the fact that a faculty building provides areas that will encourage socialization, it is important that a faculty building is designed specifically for which discipline, for what purposes the spaces in the faculty building are used, and whether there are a sufficient number of accessible classrooms and areas for courses and extracurricular activities. At the same time, professional socialization is closely related to professional identity (Clarke et al., 2013). Kerby's (1991) widely accepted definition of professional identity focuses on an ongoing process of interpretation and reinterpretation of experiences. Professional identity is shaped not only by personal and social factors (Kogan, 2000; Lamote & Engels, 2010) but also by contextual factors (Clarke et al., 2013; Tomlinson & Jackson, 2021). Universities are the educational institutions where individuals come to acquire their professional knowledge and skills, and therefore, the fact that a faculty building is designed to support this purpose can strengthen contextual factors. If a faculty building consists of physical elements that show the discipline it hosts, and field-specific and accessible learning environment, it can have an impact on the development of a professional identity. Some of the buildings in this study have the qualities to provide the contextual factor: The ARCH building contains qualified design and technical elements, the IE building has group study halls to support the purpose of the department, the GEO building has a museum containing many minerals, rocks, fossils and precious stones, the Business Building (EAS-B) was designed with elements defined as luxury, aristocratic, bureaucratic and capitalist. It can be said that all these buildings have an effect on university students' acquiring their professional identity.

Another important learning process in the process of gaining professional identity is that university students have an opinion about which disciplines the administration gives more importance to. For university students, the fact that a faculty building meets the student's personal, social, and professional needs shows that he and his discipline are important. The fact that a faculty building does not meet one or more of the needs of the students while meeting other needs does not make much difference in the perceptions of the students about the importance given to the discipline, but the high number of unmet needs increases the perception of the lack of importance for the discipline and themselves. Again, if a faculty building does not meet the needs of the students and there is another faculty building close to this building that meets the needs of the students, the difference between these two buildings becomes the subject of comparison. Students whose needs are not met come to the conclusion that the importance given to themselves and their discipline is low. If there are restrictions on the use of space by students despite the fact that there are spaces specific to the discipline, the importance given to them is

questioned rather than the importance given to the discipline. In short, the hidden curriculum of the physical environment leads to students' socialization, their perception of professional identity, and learning about the importance given to themselves and their discipline. At this point, it would be appropriate to mention the place identity. Gross and Hochberg (2016) found that place identity improves students' professional identity. Low and Altman (1992) state that biological, environmental-spatial, psychological, and socio-cultural factors are effective in the formation and maintenance of attachment to a place/identity. Accordingly, factors can be examined in five categories: 1) Elements of attachment (affect, cognition, and activity), 2) Spaces/places of different scales and characteristics, 3) Different actors (individual, group, community, and cultures), 4) Different social relations (individual), group, community and cultures) and finally 5) Temporal indicators. When the findings of this study are examined, it can be said that students in buildings with all these categories (IE, EAS and ARCH) may have higher place attachment. Again, according to Giery (2002), buildings give form to a social institution, durability to social networks, permanence to behavior patterns, and solidify society against time and change. This shows that hidden curriculum of physical environment is important for a university student to acquire the behavioral patterns of his profession.

What a university student learns from the hidden curriculum of the physical environment can be briefly considered as professional socialization. In this context, it is about whether the physical environment is designed in a structure that facilitates or complicates professional socialization in order to characterize the effects of the hidden curriculum as positive and negative.

Does the Hidden Curriculum of the Physical Environment Express the Learning Process or Outcome?

Since the definition of the hidden curriculum is a process that leads to results, it expresses both the process and the result (Seddon, 1983). In this study, it was concluded that the physical environment hidden curriculum shows both the process and the result. Even if a university student has an idea about the physical environment after his first impression, this idea can become stronger over time or change in the opposite direction. The relationship between undergraduate students and the environment is a continuous process; students first use a particular place, spend time with their friends or others there, collect memories there, and form the meaning of that place over time. In short, students derive meaning from their experiences occurring in a particular place. 'Meaning' is an important topic in Environmental Psychology. Relph (1976), one of the leading names in Environmental Psychology, defined three components of a place in his important work called ‘Place and Placelessness’: Physical environment, activities and meanings. Of these, 'meanings' are the most difficult to explore. One reason for this difficulty can be related to the 'continuity and change' in the time dimension that Gustafson (2001) defines in her study of the meanings of place. The continuity of an individual's relationship with the place includes social relations based on the place, a historical environment and local traditions, and thus its boundaries cannot be clearly defined. Change, on the other hand, causes users to consciously develop new meanings for a place due to external events and developments. In this context, the hidden curriculum of the physical environment refers to the learning process. Replacing a result-oriented approach, which is common in research on educational spaces, with a process-oriented approach (Berman, 2020) is also important to find the meaning of space. So, “how students how they move in, inhabit and reconfigure space, how they create congenial learning places, how they assemble tools and other artefacts in their work as students” will make significant contributions to the literature (Ellis & Goodyear, 2016, p. 181).

On the other hand, hidden curriculum is linked to results. Martin (1994) emphasized that the outputs of the hidden curriculum are “a hidden curriculum consists of some of outcomes or by-products of schools or of non-school settings, particularly those states which are learned yet are not openly intended” (p. 156). In addition, the physical environment of schools is widespread and its impact is consistent (Gordon, 1982). Similarly, in this study, the physical environment is an effective factor that changes the students' socialization outcomes and their feelings and thoughts about whether the building is field-specific or not. In addition, the physical characteristics of a place change over time, and these changes may have different consequences on students' daily life routines, socialization, well-being, and university life.

How to Study the Hidden Curriculum of the Physical Environment?

The hidden curriculum is the unspoken but effective message that imparts knowledge, attitudes, norms, values, and beliefs to students and is transmitted to students through the cultural, social, physical, and organizational environment of an institution. In this study, the role of the student in the conceptualization of the hidden curriculum was taken into account and it was tried to be examined through the students' views and perceptions. Just like the official program, the target audience of the hidden curriculum is students. For this reason, the hidden curriculum should be studied with students. The point that researchers criticize here is that students cannot look at the phenomenon as an expert researcher. On the other hand, the hidden is the unseen, the unknown, etc. conceptualized as being, it is not possible to discover the hidden. Therefore, the explicit and direct effects of the physical environment have an important place in the evaluation of the hidden curriculum. In addition, students can create their own hidden curriculum that is not seen by researchers (Portelli, 1993), and students' comments and the facts they focus on can lead researchers to different studies. At this point, the method used in hidden curriculum studies is important. Again, according to the model presented by Environmental Psychologist Canter (1977), the place consists of the relationship between 'acts, concepts, and physical attributions' and emphasizes the importance of evaluating a place from the perspective of the users (cited in Göregenli, 2015).

Vallance (1980), who contributed to the hidden curriculum literature, encouraged the use of qualitative inquiry to examine the hidden curriculum, as qualitative inquiry is an inquiry tool free of traditional constraints. At the same time, the hidden curriculum, which is far from the traditional definition of school, provides an opportunity to initiate a new, evolving research technique and theory to complement what is available in the formal curriculum area (Vallance, 1980, p. 141). With this opinion, both photographs and walk-through interviews were used in this study, which shows the numerous aspects of the case. Because photography "extend the hidden assumptions" (Hammond, 1998, p. 69), interviews using photographs allowed more detailed data to emerge when analyzing two different locations. Walking interviews, on the other hand, made it easier for the participants to examine the places and objects in the visited area with more questions. It is also important that the participants in the hidden program do not say as much as what they say. In this context, the areas that university students did not visit also gave clues about what they did. It can be said that interviewing with photographs and walking around are among the useful research methods for discovering the hidden curriculum of the physical environment. Moreover, photographic mapping techniques can also be useful to understand students' preferences for using informal learning spaces (Harrop & Turpin, 2013). Additionally, methodologies such as ethnographic (Berman, 2020), phenomenology and ethnomethodology

(Boys, 2011) can be used to more clearly understand the meanings and practices that students bring to learning spaces.

This study shows which places and spaces are important for university students. Classrooms are not the only place where learning takes place, and out-of-class environment have a great role for students (Boys, 2009; Cox, 2018; Harrop & Turpin, 2013; Ipser et al., 2021). Van Note Chism and Bickford (2002) state that understandings such as "learning only happens in classrooms", "learning is an individual activity" and "learning demands privacy and removal of distractions" (p. 94) about learning and learning environment are old assumptions. Similarly, this study revealed that 'learning takes place in every part of the faculty and campus environment', 'learning takes place with the help of the social environment', and 'with the removal of restrictions, students should be given the freedom to practice'. In this context, museums for GEO students, laboratories for EEE students, group study hall for IE students, social areas for EAS students and canteens and social areas for all students have very critical roles in university education. 'Always of some setting' and 'some times' (Martin, 1994, p. 138) and each place has its own hidden program for a particular group, so these places can be studied one by one with detailed observations. In addition, space itself is seen as a cultural product (Jackson, 1984). 'Place itself is a cultural product that emerges as a result of human arrangements and organizations related to time and space and is transformed by a certain group through its technology and culture' (Göregenli, 2015, p. 173). For this reason, it is recommended to study a particular place. In addition to these, students' feelings and thoughts during their first encounter with a place can be taken. In this research, the meanings of the places in the university were not asked one by one, but the places with more meanings emerged with the importance of the places and the feelings they acquired through the places in the student's evaluation of the place. Students can be explicitly asked what a place means to them.

Last Words

This article presents a theoretical proposition for understanding the hidden curriculum of the physical environment. In order to understand the hidden curriculum of the physical environment, taking into account the views and behaviors of the users is necessary for understanding both the direct effects of the physical environment and hidden learning. The impact of the physical environment on people is obvious. In this study, the direct effect of the physical environment on the socialization of university students, their emotions, and their thoughts on the specificity of their buildings were revealed. These direct effects of the physical environment are also interrelated with each other. Whether a faculty building meets the personal, social, and professional needs of the students or not also affects the feelings of the students. On the other hand, these direct influences are important sources for understanding the meaning of a particular place. With this study, it has been revealed that determining the meaning of a place is important in terms of the hidden curriculum because the relationship of a person with the place is life-oriented and this life, which is unique to each individual, gains a community-specific structure in public spaces.

As a result, elements that are visible to students such as the direct effects of the physical environment, the relations of these effects with each other, and the meaning created by the students about the space constitute an important basis for the exploration of the hidden elements.

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Geniş Türkçe Özet

Giriş

Okullar, bilgi ve becerilerin öğretilmesinin ötesinde değerlerin ve tutumların aşılanmasında da çok önemli kurumlardır (Demir & Paykoç, 2006). Değerlerin ve tutumların kazandırılmasında, okullarda okutulan resmi programın yanı sıra örtük program etkili olur. İlk kez Jackson'ın (1968) çalışmalarıyla ilişkilendirilen örtük program kavramı resmi olmayan beklentilere, örtük değerlere ve normlara atıfta bulunur. Kısaca, örtük program, öğrencilere bilgi, tutum, norm, değer ve inanç kazandıran, bir kurumun sosyal, kültürel, örgütsel ve fiziksel ortamı aracılığıyla aktarılan ya da öğrenci tarafından edinilen etkili mesajlardır. Örtük programın örtük olarak adlandırılmasının sebebi, öğrenilen değerlerin resmi programlarda belirtilmemiş olmasıdır. Bu yönüyle, öğretmen davranışları, öğretmenin söylemleri, okul kuralları, ders kitaplarındaki söylem ve görseller örtük program olarak ele alınır. Fiziksel çevre örtük program kapsamında ele alınan bir diğer konudur. Fiziksel ortam ile ilgili çalışmaların bir bölümü ısı, ışık, gürültü, okulun büyüklüğü, havalandırma gibi çevresel ortamın eğitimsel sonuçları üzerine yoğunlaşırken, bir diğer bölümü fiziksel çevrenin örtük programı açısından incelenmesine ilişkindir. Örtük program yazarları (özellikle Bowles & Gintis, 1976; Dreeben, 1967; Getzels, 1974) okulun sosyal ve fiziksel çevresini örtük programın bir parçası olarak ele almıştır. Getzels (1974), farklı sınıf düzenlemelerinin, öğrenci ve öğrenme sürecinin doğasına ilişkin farklı anlayışlar ortaya koyduğunu gösterir (Gordon, 1982). Cox'a (2011) göre yükseköğretimde de fiziksel bir alanın

tasarımı ile disiplin, alışkanlık ve örtük değerlerle birlikte davranış kuralları ve rol modeller aktarılır. Mekân, söylenmemiş bir sessizlik ve bağlantısızlık mesajı taşıyabilir (Oblinger, 2006). Fiziksel çevrenin önemi rolü alan yazında tartışılmasına rağmen, özellikle örtük program konusu altında analiz eden bir çalışmaya rastlanmamıştır. Bu nedenle bu çalışma, fiziksel çevrenin örtük programının daha iyi kavramlaştırılması ve incelenmesi hususunda kuramsal bir çerçeve sunduğu ve ilerideki çalışmalara yön verebileceği için önem arz etmektedir.

Yöntem

Bu gömülü kuram çalışmasında, "fiziksel çevrenin örtük programı" olgusunu derinlemesine, kapsamlı ve farklı bakış açıları ile incelemek ve kavramsallaştırmak amaçlanmıştır. Bu amaç doğrultusunda yarı-yapılandırılmış görüşmeler yapılmış, veri çeşitlemesi için görüşmeler iki farklı yöntem ile gerçekleştirilmiştir: Yürüyerek görüşme ve fotoğrafla tanımlama. Çalışma grubunu ve yerlerini seçmek için maksimum çeşitlilik örnekleme yöntemi kullanılmıştır. Katılımcılar seçilirken yaş, cinsiyet, sınıf düzeyi ve bölüm ölçütlerine dikkat edilerek çeşitleme sağlanmıştır. Binalar seçilirken ise binanın yaşı, bir fakülte ya da bölüme ait bina sayısı, binanın yerleşkedeki konumu, binanın mimari yapısı dikkate alınmıştır. Araştırmaya toplam yedi farklı fakülteden ve bölümden 93 üniversite öğrencisi katılmıştır. Veri analizi için gömülü kuram çalışmalarının veri analizi aşamaları izlenmiştir.

Bulgular

Üniversite fiziksel çevrenin örtük programı üç temel boyutla açıklanmıştır. 'Fiziksel çevrenin görünen ve algılanan etkisi', 'fiziksel çevrenin anlamı' ve 'fiziksel çevrenin gizli yanı'. İlk boyut olan fiziksel çevrenin görünen ve algılanan etkisi üniversite öğrencilerin bina ve yerleşke fiziksel çevresine ilişkin doğrudan yorumlarıyla açıklanmaktadır. Öğrencilerin fiziksel ortamlara ilişkin yorumları üç şekilde ele alınmıştır: 1) Fiziki çevrenin öğrencilerin sosyalleşmesine etkisi, 2) Fiziksel çevrenin binanın alana özgü olup olmadığına ilişkin öğrenci düşüncelerine etkisi, 3) Fiziksel çevrenin öğrencilerin duygularına olan etkisi. İkinci boyut olan üniversite fiziksel çevresinin anlamı doğrudan katılımcıların söylemleri ve araştırmacıların verilerden elde ettikleri çıkarım ve yorumlamaları doğrultusunda ortaya koyulmuştur. Bu çalışmada yerleşke fiziksel ortamının taşıdığı anlamlar üniversite kavramı üzerine odaklanmıştır. Bu bölümde, 'Üniversite nedir?' sorusu fiziksel çevre aracılığıyla yanıtlanmaya çalışılmıştır. Akademik binanın mimarisi, amfi sınıflar, çok amaçlı binalar ve öğrenci merkezli yerleşke üniversiteyi temsil eden göstergelerdir. Bu çalışma kapsamında ele alınan üçüncü ve son boyut ise örtük programın gizli olan görünmeyen yanıdır. Bu boyutun adı 'görünmeyen' olarak adlandırılmıştır çünkü öğrencilerin fiziksel çevre ile ilgili yorumlarından çok, öğrencilerin fazla değinmedikleri noktalara vurgu yapılmıştır. Örtük programın yorumu bir araştırmacıdan diğerine farklılık gösterebilir. Yükseköğretimdeki örtük program araştırmalarında fiziksel çevrenin örtük programı üniversitenin misyonuyla ilişkilendirilmektedir (Chapman, 2006; Gair & Mullins, 2001; Jessop & Smith 2008; Kenney vd., 2005). Ancak makalenin uzunluğu sınırlı olduğu için bu ilişkiye yönelik yoruma yer verilmemiştir.

Sonuç ve Tartışma

Bu bölümde, fiziksel çevrenin örtük program olgusu, üç temel soru çerçevesinde irdelenmiştir: 1) Öğrenciler fiziksel örtük programdan aslında ne öğreniyor? 2) Fiziksel çevrenin örtük programı, öğrenme sürecini veya sonucunu ifade eder mi? 3) Fiziksel çevrenin örtük programı nasıl çalışılır? İlk olarak, bir üniversite öğrencisinin fiziksel çevrenin örtük

programından öğrendiklerini kısaca profesyonel sosyalleşme olarak ele alınabilir. Bu kapsamda fiziksel çevrenin örtük programının etkilerinin olumlu veya olumsuz olarak nitelendirilmesi profesyonel sosyalleşmeyi kolaylaştıran ya da zorlaştıran yapıda tasarlanmış olup olmamasına bağlıdır. İkinci olarak, bu çalışmada fiziksel ortam örtük programının hem süreci hem de sonucu gösterdiği sonucuna ulaşılmıştır. Bir üniversite öğrencisinin ilk izleniminden sonra fiziksel çevre hakkında bir fikri oluşmuş olsa da bu fikir zamanla güçlenebildiği gibi aksi yönde de değişebilir. Son olarak örtük programın çalışılması nitel araştırma yöntemlerinin kullanılması ve derinlemesine bilgi edinilmesi önemlidir.

Bu makale, fiziksel çevrenin örtük programını anlamaya yönelik bir model sunmaktadır. Fiziksel çevrenin örtük programının anlaşılması için kullanıcıların görüşlerinin, davranışlarının dikkate alınması hem fiziksel çevrenin direkt etkilerini hem de örtük öğrenmelerin anlaşılması için gereklidir. Fiziksel çevrenin insanlar üzerinde etkisi açıktır. Bu çalışmada fiziksel çevrenin üniversite öğrencilerinin sosyalleşmelerine, duygularına ve binalarının alana özgülüğüne yönelik düşüncelerine doğrudan etkisi ortaya çıkmıştır. Fiziksel çevrenin bu doğrudan etkileri birbirleri ile de ilişkidir. Bir fakülte binasının öğrencilerin kişisel, sosyal ve mesleki ihtiyaçları karşılama ya da karşılamama durumu öğrencilerin duygularını da etkilemektedir. Öte yandan, bu doğrudan etkiler belirli bir yerin anlamının anlaşılması için önemli kaynaklardır. Bu çalışmayla bir yerin anlamını tespit etmenin örtük program açısından önemli olduğu ortaya çıkmıştır çünkü insanın mekânla ilişkisi yaşantı odaklıdır ve her bireye özgü olan bu yaşantı ortak kullanım mekânlarında topluluğa özgü bir yapı kazanmaktadır.

Sonuç olarak, fiziksel çevrenin direkt etkileri, bu etkilerin birbirleriyle ilişkileri ve öğrencilerin mekâna ilişkin oluşturduğu anlam gibi öğrenciler tarafından görünen unsurlar örtük olan unsurların tespiti için önemli bir temel oluşturur.