Mimarlık ve Yaşam Dergisi
Journal of Architecture and Life
7(3), 2022, (791-805)
ISSN: 2564-6109
DOI: 10.26835/my.1069226

Araştırma Makalesi

A Lifelong (Informal) Learning Experience in Architectural Design Education: The Case of KBU Department of Architecture with Competitions

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Abstract

In Today's conditions, where the information flow is intense, it is known that the education given only in schools is insufficient for architectural education, and the importance of individual development outside of school is increasing. Competitions, whose educational contributions many studies also draw attention to, are one of the essential alternatives for this personal development. It is vital to raise architecture students' awareness by motivating them to improve their individual experiences thanks to competitions. In this context, a series of competition experiences were held with Karabük University (KBU) architecture students with a promising approach, which is not uncommon in the architectural education process. These national-level competitions based on different contexts were carried out under the authors' design studio studies. A survey study on these competition experiences has been conducted with contestant and non-contestant students. The survey results were evaluated within the framework of the observations made during the competition and the information obtained from similar studies in the literature mentioned here. As a consequence of this study, positive outcomes were obtained, especially in terms of students' self-confidence and collaboration, with the experimental research carried out at the intersection of professional experience and lifelong learning. It has also been confirmed that competition experiences are an essential motivational tool.

Keywords: Design education, competition, informal approaches, experiential learning.

Mimari Tasarım Eğitiminde Bir Yaşam Boyu (Müfredat Dışı) Öğrenme Deneyimi: Yarışmalarla KBÜ Mimarlık Bölümü Örneği

Öz

Bilgi akışının yoğun olduğu günümüz koşullarında, mimarlık eğitiminde yalnızca okullarda verilen eğitimin yeterli olmadığı, okul dışında kişisel gelişimin öneminin giderek arttığı bilinen bir gerçektir. Birçok araştırmacının da eğitsel katkılarına dikkat çektiği yarışmalar, bu kişisel gelişimin vazgeçilmez alternatiflerinden biridir. Mimarlık öğrencilerinin rekabet sayesinde yarışma deneyimlerini artırmaları için onları motive ederek farkındalıklarını artırmak hayati önem taşımaktadır. Bu bağlamda, mimari eğitim sürecinde pek rastlanmayan, teşvik edici bir yaklaşımla, Karabük Üniversitesi (KBÜ) mimarlık öğrencileri ile bir dizi yarışma deneyimi gerçekleştirilmiştir. Farklı bağlamları kapsayan ulusal ölçekli profesyonel düzeyde olan bu yarışmalar, yazarların koordinatörlüğünde yürütülmüştür. Bu yarışma deneyimleri üzerinden yarışmaya katılan ve katılmayan bir grup öğrenci ile bir anket çalışması yapılmıştır. Anket sonuçları, çalışmada da değinilen, yarışma süresince yapılan gözlemler ve literatürdeki benzer çalışmalardan edinilen bilgiler çerçevesinde değerlendirilmiştir. Çalışma sonucunda

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Gönderim Tarihi / Received Date: 07.02.2022
Kabul Tarihi / Accepted Date: 22.10.2022

profesyonel mesleki deneyim ve yaşam boyu öğrenme arakesitinde yapılan deneysel çalışmayla özellikle öğrencilerin özgüven ve iş birliği konusunda olumlu sonuçlar elde edilmiştir. Ayrıca, yarışma deneyimlerinin önemli bir motivasyon aracı olduğu teyit edilmiştir.

Anahtar Kelimeler: Tasarım eğitimi, yarışma, enformel yaklaşımlar, deneyimsel öğrenme.

1. Introduction

Ideal architectural studio education proposes environments where knowledge is structured, questioned, and constantly changing and where students reconstruct it by developing what they already know (Aydınlı, 2015, p. 4). Here, the process generally operates by revealing the student's potential, examining it, and making sense of it by alteration. The instructor is the person who provides the available environments to produce information; on the other hand, the student is who actively constructs and makes knowledge through mental activities by experimenting in the equipped environment/under the defined conditions. Also, the assessments aim at improving thinking and learning rather than outcome-product-oriented. This studio education takes part holistically, through the contributions of the other various theoretical and practical courses, in the curriculums of architecture schools. However, due to time constraints, the increase in the number of students, and the limitations in the measurement and evaluation of formal education, this understanding is not fully reflected in Today's educational conditions. The hidden curriculum can lead the process to the master-apprentice relationship, in other words, a one-way criticism approach (Ciravoğlu, 2003, s.n.y). Predominantly, the goal of revealing individual characteristics may generally put the development of a collaborative working culture into the background. Regarding criticism, Architect Caesar Pelli points out that team-oriented architectural offices are much more common in real life (Emam et al., 2019, p. 163). Due to situations like these, architectural education given in traditional studios is insufficient to make students understand architecture independently (H. Yürekli and Yürekli, 2004).

Therefore, besides formal architectural education, informal studies like workshops, competitions, internships, seminars, conferences, exhibitions, technical trips, and excavations have had undeniable importance and have become necessities of lifelong learning (Polatoglu & Vural, 2012, p. 480). Because it doesn't require any externally dependent obligation, this informal education presents opportunities for motivating, establishing environments where different mindsets can act together, gaining confidence, exhibiting individual characteristics, taking the initiative, and using intuitions (İ. Yürekli & Yürekli, 2004, p. 61).

Among the informal studies are architectural competitions in which the architect candidates are involved personally or as part of a team, where there is a high probability of losing, and where solutions are expected to solve specific issues/problems quickly. So they provide significant educational gains regardless of the results (Dinç, 2010, pp.23-26). For economic reasons and intense working conditions, through educational methods based on traditional top-down learning and evaluations, architecture students must contend with environments where competition is fierce. Architectural competitions are often associated with architectural practice and seem an excellent way to start as an expert (Ortiz, 2020, p. 111).

Today's conditions called the "information age, where there is an intensive information flow and the concept of time has been more critical with this flow, can seem dynamic.

For that reason, this study shares and inquiries about competition experiences realized by the participation of the students from the architecture department in KBU in 2021 to support current formal education, which is insufficient in the architectural discipline. Firstly, the study focuses on the competitive culture in architecture, the contributions of novice architects to the process, and their acquisitions. Then, it introduces the procedures, examples, and experiences of the competitions in which the students and the authors have participated. Within the framework of the observations and experiences gained during the process and the findings obtained from the literature research, it comparatively discusses the evaluation study results between the students who participated and those who did not participate.

2. Architectural Education and Competition

As a part of natural life, the understanding of competition has always existed in the life of human beings in different forms in different times and conditions and has undertaken the task of proving the individuals' existence against the people around them. In the architectural discipline, this approach is in the form of evaluating the resultant products for the reasons such as aesthetic concerns, functional requirements for life, sociocultural needs, effective use of resources, sustainability, the economy, etc., in various platforms. And it is very ordinary and indispensable. Starting with the education process, it continues to exist throughout an individual's professional practice.

2.1 Competitions Tradition in Architecture

Although the history of competitions in architecture dates back to the ancient Greek tradition of the Olympic Games, the first recorded competition is known as the reconstruction of the Acropolis in Athens in 448 BC (Andersson et al., 2016, p. 8). With the French Revolution becoming a tool based on brotherhood, equality, and independence in architecture, competitions spread worldwide. Today, the International Union of Architects (UIA) explains that an architectural competition has been a procedure for selecting solutions as the best way to achieve a suitable built environment in architectural services (UIA, 2017, p. 6).

Competitions are a way to self-promotion and demonstrate professional knowledge for architects who are just starting their profession or architect candidates besides getting jobs for many architects (Çağlar, 2013, p. 5). In addition, while some define competitions as methods of practicing design thinking and communicating, others interpret them as tools of discourse development. Architect Nurcan Ünsal expresses that they serve as lifelong learning means (Dinç, 2013, p. 29). In other words, they are a research-based approach that makes a non-linear relationship with customers (Guilherme, 2014, p. 445). Through competitions, designers can think, discuss research, and reproduce knowledge. In that respect, there is a similarity to academic comprehension. Therefore, using and evaluating competitions as a link between academy and practice is essential.

The understanding of competition in education has effectively gained a strong character in Beaux-Arts, one of the cornerstones of Today's architectural education. There were a series of competitions in different forms in this education curriculum. Students used to be tested by these competitions from the program admission to graduation. In this process, an independent jury used to evaluate the students' studies. There was a hierarchical order between old and new students. However, this approach of Beaux-Arts led to a competitive pedagogical system that took care of winning rather than learning (Cantürk Akyıldız, p. 391).

For this reason, it doesn't take place in Today's many architecture schools. Nonetheless, it is possible to see the samples of competition-based approaches in recent years, for example, in AA. Under the leadership of Alvin Boyarsky in London in the early 1970s, AA's unit/office (studio) system expanded into a dialogue-based structure with a rich staff of instructors (Ortiz, 2020, p.112). The approach of this studio system can be summed up in five action sequences. These can be listed as representation (technical expression), narration (project description), media (interaction with various forms of content production), events (use of historical knowledge for practical use), and competitions. In this system, competition among the sequences seemed to be a pedagogical tool. For example, one of AA's studios, known as "Unit 9", has experienced competitions such as Roosevelt Island residential settlement, Photography Museum, Dutch Parliament Building, and the Irish Prime Minister's residence in different periods together with OMA, one of the architectural offices.

Turkey's first record student competitions[2] were organized in 1983 (Köknar, 2013, p. 117). Since then, official institutions, associations, and private entrepreneurs as sponsors have held various competitions. The most well-known example of a competition culture in education is the Archiprix competition, in which the jury evaluates diploma projects. It started in 1996 and is supported by organizations such as the Şevki Vanlı Foundation, the Building Industry Center, and the Architects Association. It aims to increase the competition between different educational institutions, identify the diversity of project subjects, and improve the quality of professional education by discussing it. In the 2000s, according to different categories, Architecture Education Association arranged “MimED” competitions for architecture students’ projects belonging to all semesters in the curriculum. These competitions have begun to affect the preferences of architectural project subjects in the curriculums (Köknar, 2013, p. 121). Similarly, the other competition programs do as well. In this context, in cases where their schedules match the syllabus, the competition subjects have become the content of the architectural project courses.

2.2 Contributions of Competitions in Architectural Education

In their competition-based studies, including corporations of academia and the business world, Uçar and Sarıkaya Levent (2013, pp. 254-255) points out that there has been an increase in students' motivation and culture of teamwork (in terms of the development of social relationships, task allocation, and individual development). Also, they state that their awareness has developed in conceiving customer relations. Bibbings et al. (2018, p. 386) declare that students' acquisition of non-field knowledge has increased thanks to collaboration in their experiences, and they have tested actual life conditions. Also, Rosh et al. (2022), in their study, stated that when students work in a competition with a team environment, they contribute positively to their leadership skills.

According to Gunagama and Pratiwi (2020, p. 176), as a consequence of their survey study on competitions, the essential benefit of architectural competitions is that students gain new experiences, which they don’t obtain through school courses, by participating in such activities. They list these experiences as developing the abilities to design, socialize with teamwork, use effective time management, architectural software and visualization techniques, oral and written presentation, acquire additional experiences, understand contextual issues through field studies, and have financial gain.

[2] One of these competitions was called as “Cumalıkızık Village/ Suggestions for 2007” organized by the Chamber of Architects while the other was “Student Idea Project competition” about “Life, Space, Time”.

As a result of Unit 9[3] experiences, Ortiz (2020, pp.111-121) asserts that competitions offer opportunities to create new narratives by reconfiguring them and responding to existing problems. He emphasizes that they enable imagination and increase generative education models. At the same time, he points out their encouragement of the hybrid relationship between professional practice and educational studio besides historical (scenario) expressions and practical uses. In other words, he notifies that they blur the boundaries between the architectural office and education studio and allow premature interaction with professional organizations. Apart from these, he explains that the competitions ensure that roles, positions, and opinions transform into a variable and dynamic structure to reproduce new information in an environment where students and instructors with different characteristics come together in asymmetrical hierarchies.

Architects Alper Derinboğaz and Birge Yıldrım Okta, who received awards in various competitions, point out that these experiences contribute to the cooperation and coordination of the students (Abay, 2021, s.n.y). Similarly, Deniz Dokgöz interprets them as a symbiotic collaboration by defining the competitions as the acquisition of mutual learning about design besides technical expression and presentation achievements. Rahmawati et al. (2022, p.13) state that competition can increase the sense of belonging to a group. Cihan Sevindik emphasizes that there is no hierarchy in competition teams. Furthermore, Okta remarks that contests help the participating students develop analytical thinking and problem-solving abilities (Abay, 2021, s.n.y.).

3. Experience with Competitions

As a result of the research and experiences related to the competitions, it is possible to observe that such practices provide qualified motivation. With this motivation, it is clear that skills like abilities to increase design/ professional knowledge, learn presentation techniques, achieve adaptation of team works, collaboration, and organization, and conceive customer relationships have improved. Coordinating (formal) education in academies and competitions is usually challenging for different reasons. So, it is important to gather with a " workshop " approach and create spare time. In this context, a workshop was organized with KBU students for "learning by competition."

3.1 Process of the Competition(s)

The “Learning by competition” workshop was conducted by the studio coordinators who are Ahmet Emre Dinçer, Ömer Özeren, and Osman Ziyaeddin Yağcı. It was completed in approximately 2,5 months in April-June 2021. Due to the Covid-19 epidemic, it was held online. About 70 hours of general meetings were held for 8-11 weeks, apart from the individual works of the project authors and students.

The process started with an open call to students who took Architectural Project VI and Project VII studio courses in the Department of Architecture in the Faculty of Architecture at Karabuk University that semester. At the beginning of the open call, the number of participants was planned to be 15 students. However, the capacity increased to 25 students due to the high demand. Studio coordinators made student selections with the criteria of application priority and didn’t prefer any selection method. However, three students who took Architectural Project V and Project VIII courses participated in the workshop due to three students’ requests to leave for various reasons at the end of the introductory meeting. The total number of participants was finally 26 students.

[3] Unit 9 is one of diploma programs of the ‘Unit System’ at the Architectural Association School of Architecture (AA), allowed for a more horizontal and collaborative teacher-student relationship.

As the second step after the student selections, although studio coordinators had done preliminary research, the mutual decision of the students and the coordinators determined five competitions for participation with a more detailed evaluation. Studio coordinators let the students use their initiatives to define teams for the determined competitions by considering their harmony. According to the courses taken by the students, the distribution of the groups consists of Project VI and VII in the first Team; Project VI, VII, and VIII in the second Team; only Project VII in the third Team; Project V, VI, and VII in the fourth Team; Project VI and VII in the fifth Team. The groups formed by the students who took different project courses exemplified a vertical studio environment, which was commonly in formal education.

After completing the competition groups, preliminary research processes (land analysis and field readings, etc.) started for each competition subject as a typical approach to the architectural design process (Table 1). It took about three weeks. During the design phase, as studio coordinators gathered among themselves to determine fundamental decisions, they held meetings with team members to develop drafts/sketches. Studio coordinators took students' thoughts and suggestions into account. All groups, except for the completed projects, participated in all meetings during the process. Thus, besides aiming for effective time management, the process encouraged students to learn and think together. In the presentation and visualization stages following the project development stages, all groups took much more active roles.

Table 1: Working schedule of the competitions

Name of *Competitions*	***1st Week*** *(March 12)*	***2nd Week*** *(March 19)*	***3rd Week*** (March 26)	***4th Week*** *(April 2)*	***5th Week*** *(April 9)*	***6th Week*** *(April 16)*	***7th Week*** *(April 23)*	***8th Week*** *(April 30)*	***9th Week*** *(May 7)*	***10th Week*** *(May 14)*	***11th Week*** *(May 21)*	***12th Week*** *(May 28)*	***13th Week*** *(June 4)*
December 25 Gaziantep's 100th Anniversary Monument and Landscaping National Project Competition	●	●	■	■	▲	▲	▲	▲	⬟	⬟			
"Mimar Sinan" Museum and Architecture Center National Architectural Project Competition	●	■	■	▲	▲	▲	▲	⬟	⬟	⬟	⬟		
Social Centers Architectural Project Competition in Kadıköy -Hasanpaşa: Senior People's Club and Accommodation Unit	●	●	■	■	■	■	▲	▲	⬟	⬟	▲	⬟	
Social Centers Architectural Project Competition in Esenler Airport: Neighborhood House Short Break Center and Nursery School Istanbul	●	●	●	■	■	■	■	▲	▲	▲	⬟	⬟	⬟
"Mimar Sinan" Museum and Architecture Center National Architectural Project Competition	●	●	■	■	■	■	■	▲	▲	⬟	⬟	⬟	

Analyse ● *Design* ■ *Drawing &Visualition* ▲ *Presentation* ⬟

Studio coordinators coordinated interdisciplinary collaboration with participants in cases where different disciplines' intervention was needed. Since the submission deadlines of the competitions were close, design groups carried out almost all designs

simultaneously. However, there was a priority order according to the delivery schedule. At the end of the process, design groups made submissions on time.

In all groups, Studio coordinators/project owners took an active role in the projects' technical expression, visualization, and presentation stages besides designing. They fulfilled the requirements in the specifications of the competitions. In this respect, the process has been architectural office work and turned into an office internship for participants. With the announcement of the results of the competitions, the studio coordinators and design groups held a meeting, and they evaluated the winning projects and the jury reports together. Participants pointed out that their families were also excited about it, thanks to the online workshop at the end of the process. They followed the process closely and awaited the results with excitement. In this way, the workshop played a very comprehensive role, including the families, rather than the participation of 30 students.

3.2 The Resultant Products in the Competitions

In the Gaziantep monument and landscaping competition experience, studio coordinators with the design group aimed to create an object that reflected an epic struggle and made its presence felt and seen in the flow of daily life due to its site area in the city center. They considered that the proposal would be a unifying reference point that integrated with its environment and could be an open-air extension of the panoramic history museum. It emerged from a parametric approach. As a consequence of the competition, while the jury viewed the urban decisions and the representation process in the study positively, it found that the relationships of the dynamism in mass form and landscape design with urban fiction were problematic. The students made significant contributions in the presentation stages (Table 2).

Studio coordinators with the design groups made two proposal submissions to the Mimar Sinan Museum and Architecture Center Competition in Kayseri. The design subject presented significant opportunities for both design groups to examine the experiences in architecture from the past to the present, provide the original transfer of Sinan’s design approach, and commemorate Sinan.

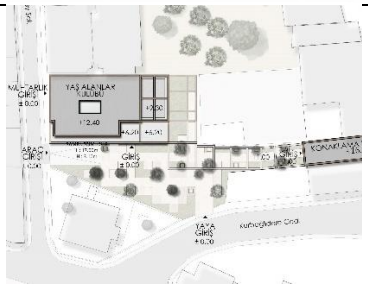
The primary emphasis of the first proposal was on understanding Sinan’s design and construction approaches in architecture. The features such as scale, centrality, simplicity, volumetric space, and ratio-proportion observed in Sinan's works were the initial/fundamental decisions in the mass design phase. In this context, the proposed model consisted of a symmetry-based modular system with the determined axes in the design site area. In this system, the museum unit was in the center as the main volume and was surrounded by other departments like the architecture center and educational studios. The model represented a permeable architecture according to spatial relations in the program. There were also these reflections of permeability in the relationships between the building and the environment. Thus, the design thinking aimed to preserve the sustainability and vitality of the park where the proposal would locate. In this model, participants have a critical role in preparing project presentations, conceptual research, and analysis.

The other alternative aimed to start a historical journey about [4]Sinan’s life in the proposed underground architecture by taking visitors away from the physical environment for a

[4] Sinan, born in Ağırnas, Kayseri in 1488/90, is a chief architect who designed many monumental buildings such as Süleymaniye and Selimiye mosques in the period of Ottoman empire.

while, with minimal intervention to the natural green texture and silhouette. The museum, one of the central units in the design specification, rose gradually to represent Sinan's apprenticeship, journeyman, and mastership terms. This gradual rise symbolized his mastery period by transforming into a monumental object above ground. The monument was a reference point that made the building perceivable above ground. Accordingly, this approach also determined the visitors' movement routes in the building. Students actively participated in the project analysis, synthesis design, and presentation stages.

Table 2: The information about the competitions.

Teams	*Competition Names*	*Site plans*	*Images*	*The Competition dates*	*Total construction areas*
1st Team	**December 25 Gaziantep's 100th Anniversary Monument and Landscaping National Project Competition**			March 5 / May 10, 2021	?
2nd Team	**Mimar Sinan Museum and Architecture Center National Architectural Project Competition**			March 5 / June 21, 2021	4500 m²
3rd Team	**Social Centers Architectural Project Competition in Kadıköy - Hasanpaşa: Senior People's Club and Accommodation Unit**			February 26 / June 15, 2021	3000 m²

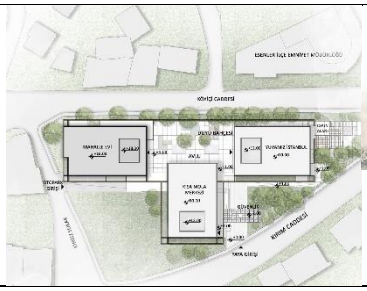
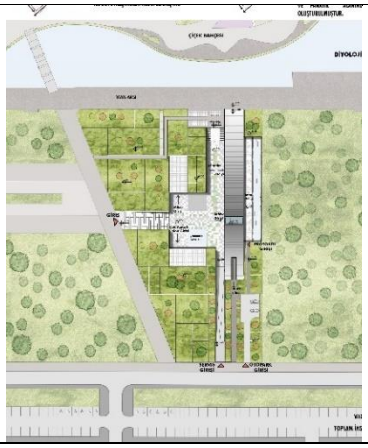
4th Team	*Social Centers Architectural Project Competition in Esenler Airport: Neighborhood House Short Break Center and Nursery School Istanbul*			*February 26 / June 15, 2021*	*1100 m²*

Table 3 (continued): The information about the competitions.

5th Team	*Mimar Sinan Museum and Architecture Center National Architectural Project Competition*			*March 5 / June 21 2021*	*4500 m²*

Finally, Studio coordinators with the design groups became participants under two sub-titles in the “Social Centers Architectural Project Competition” organized by İstanbul Metropolitan Municipality. These subtitles were “Seniors Club and Accommodation units in Kadıköy-Hasanpaşa” and “Neighborhood House, Short Break Centre and Nursery School İstanbul in Esenler.”

The Neighborhood House, Short Break Centre, and Nursery School İstanbul in Esenler would be located where concrete construction is intense. So, the studio coordinators aimed to include nature in the construction area by increasing indoor and outdoor space relations and strengthening users' relationships with green places. Accordingly, they suggested wooden façade elements in the semi-permeable structural system surrounding the inner garden/main square and three functional building blocks. The square was a solution proposal that enabled users to open to nature and develop their social belongings. Students were actively involved in the project's analysis, synthesis, design, and presentation process in the study. The jury evaluations remarked that the effort to create an introverted world was positive. Still, they commented that the masses should have had a stronger relationship with topography regarding access to the square and public use of open spaces. In addition, they criticized the homogeneous façade surface surrounding all masses not fully reflecting the design idea.

For the proposal of “Seniors Club and Accommodation units in Kadıköy-Hasanpaşa,” studio coordinators with the design group designed a modular and a grid-based model which combined two separate parcels to which the constraints of the site area led. The model presented interactive open, semi-open, and closed space suggestions, which intended to provide the user profiles’ adaptation to the dense urban environment and increase their productivity.

The proposal won a mansion prize. Regarding the study, the jury appreciated the idea of producing social green spaces used in the design to develop public spaces and the sensitivity of taking care of the proposed model's harmony with the historic building. As in the others, the students in the design group of this proposed model made significant contributions in the design and presentation stages. They especially developed creative ideas for the presentation phases.

3.3 Evaluation of the Competition(s) Process

A field study was organized to test the students' achievements in the competition(s) experience, apart from the observations of the coordinators. This study process has been handled in two ways as preparation and application stages.

3.3.1 Preparation stage

The questions that make up the content of the field study emerged from other literature research. These were the criteria in the workshop of Polatoglu and Vural (2012) on acquiring knowledge and skills during architectural education, using them, and producing new knowledge from them. In addition, their content was based on the approaches in the studies of Gunagama and Pratiwi (2020), Erbil and Doğan (2012), and Haupt et al. (2019), which researched student participation and their awareness of architectural student competitions in different periods. Finally, they were findings from the competition experiences in the literature stated at the beginning of the study and the inferences of the competition experiences. The criteria basis of the study questions is summarized as follows:

- The competition experience drew attention to the importance of environmental analysis and contextual research in design studies and raised awareness in transferring the acquired knowledge to the projects.
- The competition experience raised awareness about following, analyzing, and reflecting on current architectural issues in project studies.
- The competition experience contributed to observing the subjects about the authoritarianism of the project coordinators, which can be generally related to "grading" anxiety in formal education, and the differences in the approaches of the coordinators in out-of-school activities.
- The competition experience confirmed that out-of-school education studies increased students' abilities like predisposition to teamwork, peer learning-learning together, increase in self-confidence, taking responsibility, and self-expression.

3.3.2 Implementation stage

A total of 60 people, including 25 students participating in the competition, participated in the 16-question survey. The students who hadn't participated in the competition were at the 3rd or 4th-grade level. The survey questions included the specified criteria regarding the education process, personal information (name-surname/gender), and their current educational status (project grades and participation in activities). In the study, data was obtained by the comparative rating scale method, and this information was transferred to SPSS software. The general results of the survey are as follows in Table 3.

In this table, the most striking result is that half of both groups agreed with the hypothesis that instructors are authoritarian in designing education in schools. This result draws attention to the role of an instructor in design education and shows that some students

need support in making decisions. On the other assumptions, both groups generally made positive evaluations.

There were two independent samples to evaluate the survey results: the participants and non-participants in the “Learning by competition” workshop. Firstly, normality tests were applied to samples, and the distributions were controlled. The normality value was low (.00<0.05). However, (ignoring the normality value), both parametric (T-test) and non-parametric (Mann-Whitney U) tests were applied.

According to the T-test results, the team disposition of those who participated in the competition was higher (Avg=2.96 SD=.20). Also, their self-confidence in finding a job after school increased (Avg. =2.57, SD= .73). The Mann-Whitney U test gave similar results. These results can be summarized as follows:

- A significant difference was observed in the tendency of the students in the competition team (Mdn = 3.0) to teamwork (U = 312.5, z = -2.89, p<.05, r = -.64) compared to those who did not participate (Mdn = 3.0).
- There was no significant difference about establishing relations between the environmental meaning and context in the design decisions of the students (Mdn = 3.0) who were in the competition team compared to those who did not participate (Mdn = 3.0), (U = 400, z = -1.49, p>.05, r =- .33).

Table 3: the questions and answers concerned with educational experiences.

no	*Questions*	*Participants*	*Agree*		*Neutral*		*Disagree*	
			Num	%	Num	%	Num	%
1	I think teamwork is beneficial and should be supported in project work.	Contestant	25	**100**	0	**0**	0	**0**
		Non-contestant	25	**71.4**	4	**11.4**	6	**17.1**
2	I think that environmental analysis and context-related research in design studies effectively develop the project and increase its quality.	Contestant	25	**100**	0	**0**	0	**0**
		Non-contestant	32	**91.4**	2	**5.7**	1	**2.8**
3	If I am given a task in the after-school period, I think that I can do that job and take the necessary responsibility.	Contestant	24	**96**	1	**4**	0	**0**
		Non-contestant	25	**71.4**	5	**14.3**	5	**14.3**
4	I think that I have recently studied contemporary architectural studies and subjects in detail, and I try to reflect my achievements here in my work.	Contestant	20	**80**	3	**12**	2	**8**
		Non-contestant	24	**68.6**	9	**25.7**	2	**5.7**
5	I think that helpful information can be obtained from exchanging ideas with friends during the design study, and synergy can be created.	Contestant	24	**96**	0	**0**	1	**4**
		Non-consestant	34	**97.1**	1	**2.9**	0	**0**
6	I think the project coordinator is authoritative in project studies and design	Contestant	14	**46.7**	2	**40**	9	**36**

	decisions, and this understanding is necessary.	Non-contestant	16	**45.7**	3	**8.6**	16	**45.7**
7	I think that students should take the initiative in project studies and design-related decisions, and course instructors should be involved according to the circumstances.	Contestant	24	**96**	0	**0**	1	**4**
		Non-contestant	34	**97.1**	1	**2.9**	0	**0**

- A significant difference was observed in terms of gaining self-confidence (U = 327.5, z = -2.45, p<.05, r = -.54) of the students who were in the competition team (Mdn = 3.0) compared to those who did not (Mdn = 3.0).
- No significant difference was observed between the students (Mdn = 3.0) in the competition team (Mdn = 3.0) compared to those who did not (Mdn = 3.0) from the standpoint of examining, analyzing, and applying current architectural studies (U = 393.5, z = -.85, p>.05, r =-.19).
- No significant difference was observed between the students (Mdn = 3.0) in the competition team (Mdn = 3.0) compared to those who did not (Mdn = 3.0) about peer learning (knowledge acquisition with their friends) (U = 432, z = -.26, p>.05, r =-.06).
- A significant difference didn't emerge between the students in the competition team (Mdn = 1.0) and those who did not (Mdn = 2.0) regarding the idea that project coordinators are authoritarian in design decisions in formal education (U = 390, z = -.79, p>.05, r =-.17).
- A significant difference didn't emerge between the students in the competition team (Mdn = 3.0) compared to those who did not participate (Mdn = 3.0), in terms of students taking initiative in design decisions and the authoritarianism of their executives (U = 432, z = -.26, p>.05, r =- .06).

As a result, these benchmarking tests only supported the fourth hypothesis (except for peer learning), which was determined at the beginning of the survey about the experimental study. Despite the contestant students' positive opinions on the other hypotheses, significant differences didn't emerge. As a reason for that, it is possible to indicate the heterogeneity of student profiles in success and grade levels, the emergence of open-ended questions, and the participation of the other groups in different activities in the past.

4. Results and Evaluations

This study investigated the contribution levels of out-of-school education methods to the development of students through a workshop with the theme of "learning through competitions" besides academic architecture education. It objectively conveyed experiences gained from previous studies, observations of their supervisors during the process, and reflections from students who participated or did not participate in the survey through quantitative and qualitative evaluations. Also, it reflected the experiment's contributions of instinctive motivation and learning with examples from the products in the competition process. As a result of all these, it is possible to make the following observations:

Firstly, it is a significant experience to complete and deliver all the studies in a short period considering their content and scope and in an intense program where formal education has continued actively. A simulation of working experiences after graduation realized. The students more easily understood the problematic experiences to convey and comprehend in the school environment.

As stated in the literature research, competitions are also an educational tool for architects in business life. It is much closer to the ideal architectural design concept in education. In many architectural offices, which are also challenged by Today's conditions, the effective use of freedom and universal design criteria, such as contextual relations, which affect creativity and design ideas during the design process, cannot be fully realized. Therefore, very few students experience such a process in internship training. In this respect, it has been a unique experience that also contributed to students by multiple simultaneous competition alternatives.

As implicitly stated, competitions are information sources for theoretical and empirical studies. Other suggestions that offer sensitive and livable environments are ignored while determining the award group and the best ones in the competitions (Çağlar, 2013, p. 7). So, considering all proposals is essential. In this view, the examples not in the award group are included in this study. These examples have offered similar and distinctive solutions compared to the awarded proposals and jury evaluations. Self-criticism has been an instructive reasoning tool for the students who participated in the process. However, no difference between the two groups hasn't emerged in the follow-up of contemporary architectural approaches and the development of design ideologies in the survey study. The reason is that the question was open-ended or that some students in the non-competitor group had previously participated in different workshops, competitions, and activities. Also, another reason can be the differences between survey participants' discourses in general and actions in design processes.

As seen in the evaluation study results conducted with the students, the experiential research contributed to teamwork and self-confidence. It has been confirmed that out-of-school activities of individuals have developed their ability to take on, manage and share tasks in harmony, thanks to collaboration.

As stated before, the study took place at the time of the Covid-19 epidemic. In the study, communication was established with online critiques and meetings between both students and studio coordinators. Regarding online education, in their studies, Rongrong et al. (2022, p. 99) found that it caused a lack of students' self-motivation compared to the traditional process despite its many positive contributions. Since the participants were volunteers and the subject of the study was competition, such a problem didn't exist. However, in communication, the flexibility and convenience provided by traditional methods have sometimes not been realized in online applications due to the limitations of expression tools.

Competitions are very effective in increasing motivation to achieve the goal. However, it is necessary to note that regardless of the purpose, method, and approach, it is indisputable that all such studies on education contribute to the individual, even if their level of contribution changes. Due to the limited opportunities of the education process depending on the speed and intensity of the information age we live in, the need to fill this gap has arisen by directing the architect candidates to extracurricular activities. The study has demonstrated that students, who are aware of this situation and need, are very willing to participate in and experience out-of-school activities to tolerate these inadequate conditions, as it can be understood from their requests to participate in the "learning by competition" process and survey evaluations. Based on this, it is possible to say that supporting these potentials in students by evaluating them by educators to meet the needs and deficiencies in architectural education will increase or protect the profession's quality.

As mentioned earlier, after the completion of the study, we contacted to follow the students' experience at different time intervals in their professional practices and studentship processes. They stated that they performed better in adapting to their professional life, established better dialogue with their colleagues, and behaved more confidently in their recruitment processes. After this study, some students who continued their student life participated in competitions and obtained degrees. Notably, with the promotion and experience of the project's award, the third group achieved remarkable success at the national level in the other student competitions. As a result of such widespread effects, it was seen that this study was very beneficial for students.

Both groups in the survey agreed nearly 50% on the effects and necessity of instructors' authoritarianism in design issues. This situation is incompatible with the ideal approach of architectural education, which is explained at the study's beginning. It points out the effects of the hidden curriculum. It is necessary to note that the problem here may be the dominance of some instructors or instructors' compulsory interventions due to students' issues with taking the initiative in their studies. To eliminate such perceptions, both instructors and students should self-criticize the process.

In summary, as a result of these experiences, we want to say that informal education activities like competitions make it easier to adapt to professional life by eliminating the gap between theory and practice. Also, although the survey does not fully reflect the results, we can confirm that it helps students to gain a much more self-conscious, sensitive, entrepreneurial, social, productive, and investigative identity.

References

Abay, B. (2021, 8 Ekim). Mimarlık Yarışmaları ve Yarışmalarda Öğrencilerin Yeri. https://www.mimarizm.com/haberler/soylesi/mimarlik-yarismalari-ve-yarismalarda-ogrencilerin-yeri_132865

Andersson, J. E., Zettersten, G. B., & Magnus, R. (2016). Introduction. In J. E. Andersson, G. B. Zettersten, & R. Magnus (Eds.), Architectural Competitions as Institution and Process (pp. 7–31). The Royal Institute of Technology.

Aydınlı, S. (2015). Tasarım Eğitiminde Yapılandırıcı Paradigma : ' Öğrenmeyi Öğrenme.' Tasarım + Kuram, 11(20), 1–18.

Bibbings, H., Bieluga, P. A., & Mills, C. (2018). Enhancing creativity and independent learning of architectural technology students through the use of a real life design competition module. Archnet-IJAR: International Journal of Architectural Research, 12(1), 376–387. https://doi.org/http://dx.doi.org/10.26687/archnet-ijar.v12i1.1409

Çağlar, N. (2013). Mimarlık Yarışmaları İyi Şeyler (mi)dir? Dosya, 31, 5–8.

Cantürk Akyıldız, E. (2020). Bir öğrenme ortamı olarak tasarım stüdyosu: Maltepe Üniversitesi tasarım stüdyosu 1 deneyimi. Turkish Online Journal of Design Art and Communication, 10(4), 389–407. https://doi.org/10.7456/11004100/005

Ciravoğlu, A. (2003). Mimari Tasarım Eğitiminde Formel ve Enformel Çalışmalar Üzerine. Yapı Dergisi, 257, 43–47.

Dinç, P. (2010). Mimarlığa Yarışanlar: Mimari Yarışmalara Katılımda Süreklilik. Mimarlık, 354, 23–26.

Dinç, P. (2013). Mimarlığın Yarışan Yüzü Üzerine Notlar. Dosya, 31, 28–33.

Emam, M., Taha, D., & ElSayad, Z. (2019). Collaborative pedagogy in architectural design studio: A case study in applying collaborative design. Alexandria Engineering Journal, 58(1), 163–170. https://doi.org/10.1016/j.aej.2018.03.005

Guilherme, Pedro, Miguel, Hernandez, S. (2014). Competitions Serve a Larger Purpose in Architectural Knowledge. Fourth International Conference on Architectural Research by Design (ARbD'14), 425–451.

Gunagama, M. G., & Pratiwi, Y. (2020). The Role of Architectural Competition in the Learning Process of Architecture Students BT - Proceedings of the EduARCHsia & Senvar 2019 International Conference (EduARCHsia 2019). 176–182. https://doi.org/https://doi.org/10.2991/aer.k.200214.027

Köknar, S.A., (2013). Türkiye'de Öğrenci Yarışmaları. Yarışmalar ve Mimarlık Sempozyumu. İTÜ, İstanbul, pp. 116-122.

Ortiz, F. (2020). Architecture competitions as pedagogical tools: Bridging the unit and the office. Footprint, 14(1), 111–125. https://doi.org/10.7480/footprint.14.1.4300

Polatoglu, C., & Vural, S. M. (2012). As an Educational Tool the Importance of Informal Studies/Studios in Architectural Design Education; Case of Walking Istanbul 1&2. Procedia - Social and Behavioral Sciences, 47, 480–484. https://doi.org/10.1016/j.sbspro.2012.06.684

Rahmawati, Y., Pradipto, E., Mustaffa, Z.; Saputra, A., Mohammed, B.S., Utomo, C., Enhancing Students' Competency and Learning Experience in Structural Engineering through Collaborative Building Design Practices. Buildings, 12, 501, 2022, pp.1-20. https://doi.org/10.3390/ buildings12040501

Rongrong Yu, Michael J. Ostwald, Ning Gu, Henry Skates & Steven Feast, (2022). Evaluating the effectiveness of online teaching in architecture courses, Architectural Science Review, 65(2), pp. 89-100, doi: 10.1080/00038628.2021.1921689

Rosh D. M., Allen J.S., Jenkins D.M, & Pickett M.L. (2022). Competitive Team Envıronments And Student Leader Capacıty Growth, Journal of Leadership Education, 21(2), 1-17, doi: 10.12806/V21/I2/R1

Uçar, M., & Sarıkaya Levent, Y. (2013). Farklı bir tasarım dersi deneyimi üzerine değerlendirmeler: yarışma-tasarım dersi birlikteliği ve grup çalışması. In Y. Sarıkaya Levent & M. Uçar (Eds.), Mersin'den mimarlık planlama tasarım yazıları. Tamer Gök'e armağan (pp. 247–259). Mersin Üniversitesi Yayınları.

UIA. (2017). UIA Competition guide (Issue July). https://www.uia-architectes.org/webApi/uploads/ressourcefile/32/uiacompetitionguide.pdf

Yürekli, H., & Yürekli, F. (2004). *Mimarlık:* Bir Entelektuel Enerji Alanı. Yapı Endustri Merkezi Yayınları.

Yürekli, İ., & Yürekli, H. (2004). Mimari Tasarım Eğitiminde Enformellik. Itüdergisi/A, 3(212), 53–62. http://www.itudergi.itu.edu.tr/index.php/itudergisi_a/article/view/1007/0