

## ONLINE WORKSHOP EXPERIENCE AS AN INFORMAL LEARNING ENVIRONMENT: GAMIFICATION AND SPACE

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### Extended Abstract

The workshops contribute to design education by creating an informal learning area. The workshop environment is defined as an experience and interaction-oriented platform where students participate voluntarily, goes beyond formal education restrictions, and depends on the curriculum developed in line with measurement and evaluation systems. (Ciravoğlu, 2003; Yürekli & Yürekli, 2004). Due to these features, the workshops allow restrictions of disciplinary education to be dissolved through a specific problem or theme. It also helps to create an environment that supports peer learning while embodying creative mental activity.

Today, due to the Covid 19 pandemic, online design education has become widespread. (Kılıç & Arabacıoğlu, 2021; Peimani & Kamalipour 2021; Alawad, 2021; Gogu & Kumar, 2021). As a result, students start using digital interfaces actively in both formal and informal studio environments to meet, to access educational materials, and to produce projects. Digital tools and virtual reality provide a major contribution to the curriculum of design schools by creating new learning environments. (Olmos, 2006; Gül et al., 2008; Liu, 2017; Karadağ & Tüker, 2020).

In addition, as a result of the widespread use of Information and Communication Technologies (ICTs) in many fields to gain the attention of researchers of different disciplines, 'gamification' has emerged as a popular phenomenon that is used in learning processes. It has been observed that the concept of gamification, which can be defined as 'using game components and game dynamics for a specific purpose' in non-game environments, has an effect that increases student motivation and augments the learning process (Kapp, 2012; Mekler et al., 2013; Behl et al., 2022).

In this study, an online workshop which was organized with the theme of "Gamification and Space", hosted by Işık University in the Department of Interior Architecture and Environmental Design, between 26-30 July 2021 is investigated as a case study. 23 workshop instructors contributed to the workshop with 11 different workshop themes. 53 students applied as participants and 49 completed the workshop. 6 workshops were scheduled weekly, and 5 workshops were scheduled as single-day. On the first day of the workshop, two seminars titled

"Gamification and Space" and "Gamification for the Conservation of Historical Sites and Awareness" were held. On the last day of the workshop week, the process and the results of the workshops were shared by the instructors and participants.

In the study, the contribution of the concept of gamification to design education has been evaluated in line with the observations and experiences gained. The data was gathered from the workshop presentations held on the last day and the final manuscripts of the workshops. The collected data was analyzed by the workshop coordination team, and classifications were made regarding the strategies used in the design

education process by the concept of gamification. In addition, it was aimed to discuss the potentials of ICTs enabling online interaction.

When the findings of the workshop were analyzed, it was revealed that there was a rich research environment for problems in various fields of design disciplines. Accordingly, the findings were analyzed under three headings as student experiences, instructor experiences and workshop experiences.

In terms of the student experiences, students gained new technical knowledge and developed presentation skills through virtual environments and digital interfaces during the workshop. The important contribution of the informal workshops to the educational processes is that they bring different design disciplines together. Thus, the students had the opportunity to go beyond the boundaries of their disciplines and experience different ways of thinking and producing. In addition to weekly workshops, one-day workshops were also included in the workshop. In the one-day workshops, working areas such as performance art and computational thinking were addressed in the design processes, thereby expanding the perspectives of the participants. The fact that the workshop offered an informal experience and was based on volunteerism had a positive effect on the motivation of the students. In addition, the workshop instructors stated that they observed that the informal working environment helped students feel free and behave comfortably during the design process.

Considering the experiences of the instructors, the workshop allowed instructors, who have different expertise in the design field, to organize a workshop and to work with students who want to improve their skills in the instructors' field of expertise. On the closing day of the workshop, works produced in workshops were presented by the instructors and students to all participants. Thus, instructors living in different cities had an opportunity to come together and share their knowledge. The establishment of these sharing environments is important in terms of providing potential for future scientific studies.

Regarding the workshop experiences, it is analyzed how the concept of 'gamification' is used in the structure of the workshops. The workshops are grouped under three main headings;

1. Gamification for the design process,
2. Gamification for the learning process,
3. Using the concept of gamification as a design theme.

The concept of gamification is observed to be mainly associated with the design process considering the methods of the workshops. The theme of the gamification was mostly used to motivate the design process and was used to add creativity to the design process. Gamification elements are used for the learning process in order to transfer and reproduce a theoretical knowledge within the scope of workshops. One workshop used gamification as a design theme for the final product.

The tools used in the workshops are varied throughout the workshop process. The workshops started on Blackboard, which is a 'virtual learning environment', but instructors added online virtual tools such as Zoom and Miro to support their workshop process. Workshops supported by computer-aided design tools and methodologies contribute to enriching the informal learning environments in the future. It has also emerged that online tools and environments constitute an important interface in terms of using the concept of gamification in the design workshops.

However, virtual learning environments within the framework of technological infrastructure include some limitations when design disciplines are considered. Therefore, the study suggests that a comparative analysis between online and face-to-face environments is necessary for further studies. In addition, it is thought that the experiences gained from online workshops as an informal learning tool have the potential to contribute to fourteen-week design studios at various levels in the future.

**Keywords:** Online workshop, gamification, Interior design education, informal learning environment, Game-based learning.

## References

- Alawad, A. (2021). Evaluating Online Learning Practice in the Interior Design Studio. *International Journal of Art & Design Education*, 40(3), 526-542.
- Behl, A., Jayawardena, N., Pereira, V., Islam, N., Giudice, M. D., & Choudrie, J. (2022). Gamification and e-learning for young learners: A systematic literature review, bibliometric analysis, and future research

agenda. *Technological Forecasting and Social Change*, 176, 121445.  
doi:<https://doi.org/10.1016/j.techfore.2021.121445>

Ciravođlu, Ayşen. (2003). "Mimari Tasarım Eğitiminde Formel ve Enformel Çalışmalar Üzerine", *Yapı Dergisi*, sayı:257, s. 43-47.

Gül, L.F., Gu, N., & Williams, A. (2008). Virtual worlds as a constructivist learning platform: evaluations of 3D virtual worlds on design teaching and learning. *J. Inf. Technol. Constr.*, 13, 578-593.

Gogu, C. V., & Kumar, J. (2021). Social Connectedness in Online versus Face-to-Face Design Education: A comparative study in India. In *Design for Tomorrow—Volume 2* (pp. 407-416). Springer, Singapore.

Kapp, K. M. (2012). *The gamification of learning and instruction : Game-based methods and strategies for training and education*. Center for Creative Leadership.

Karadağ, D., & Tüker, C. (2020). A proposal for a computational design and ecology based approach to Architectural Design Studio. *International Journal of Technology and Design Education*.  
<https://doi.org/10.1007/s10798-020-09594-x>

Kılıç, S. and Arabacıođlu, B. C. (2021). Lisans Düzeyinde Uzaktan Eğitim ile Gerçekleştirilen Çalıştay: Temel Tasarım Dersinde Örüntüye Dayalı Parametrik Model Kullanımı. *Modular Journal*, 4(2), 131-151.

Liu, Z. (2017, December). Exploring the use of virtual environment for international creative education (art & design). In *2017 IEEE 6th International Conference on Teaching, Assessment, and Learning for Engineering (TALE)* (pp. 414-419). IEEE.

Mekler, E. D., Brühlmann, F., Opwis, K., & Tuch, A. N. (2013). Disassembling gamification: the effects of points and meaning on user motivation and performance. In *CHI '13 extended abstracts on human factors in computing systems* (pp. 1137-1142).

Olmos, F. (2006). A training model to develop design skills in the virtual design studio. *WIT Transactions on Information and Communication Technologies*, 36.

Peimani, N., & Kamalipour, H. (2021). Online Education in the Post COVID-19 Era: Students' Perception and Learning Experience. *Education Sciences*, 11(10), 633.

Yürekli, İpek and Yürekli, Hülya. (2004). "Mimari Tasarım Eğitiminde Enformellik", *İTÜ Dergisi/A Mimarlık, Planlama, Tasarım*, 3(1), pp. 53-62.