


Highlighting Community and Identity through an Online Interior Architecture Studio Project:


Ambassador's Residence Project

Deniz Hasirci 


*Dept. of Interior Architecture and Environmental Design, Faculty of Fine Arts and Design,
Izmir University of Economics, Izmir, Turkey (Corresponding author).*

Yasemin Albayrak-Kutlay 


*Dept. of Interior Architecture and Environmental Design, Faculty of Fine Arts and Design,
Izmir University of Economics, Izmir, Turkey*

Basak Zeynep Edes 

*Dept. of Interior Architecture and Environmental Design, Faculty of Fine Arts and Design,
Izmir University of Economics, Izmir, Turkey*

Muge Caliskanelli 

*Dept. of Interior Architecture and Environmental Design, Faculty of Fine Arts and Design,
Izmir University of Economics, Izmir, Turkey*

Haluk Tatari 

*Dept. of Interior Architecture and Environmental Design, Faculty of Fine Arts and Design,
Izmir University of Economics, Izmir, Turkey*

Silvia Rolla 

*Dept. of Interior Architecture and Environmental Design, Faculty of Fine Arts and Design,
Izmir University of Economics, Izmir, Turkey*

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D. Hasirci ORCID 0000-0001-9928-6077 (deniz.hasirci@ieu.edu.tr), Y. Albayrak-Kutlay ORCID: 0000-0002-7168-5735, (yasemin.albayrak@ieu.edu.tr), B. Z. Edes ORCID: 0000-0001-5802-701X, (zeynep.edes@ieu.edu.tr), M. Caliskanelli ORCID: 0000-0002-2189-0204, (mugecaliskanelli@gmail.com), H. Tatari ORCID: 0000-0003-0145-4656, (haluktatari@gmail.com), S. Rolla ORCID: 0000-0002-3064-366X, (silvia.rolla@ieu.edu.tr)

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Abstract: Within the confines of the COVID-19 pandemic, design educators were required to revisit tried and true ways of teaching and create original ways to connect with their students. In this paper, the aim is to achieve the sense of global interiors community in online teaching regarding teaching methods as well as project topics. Moreover, various means by which an enhanced studio experience may be provided is investigated. The year-long project with a focus on “concept building”, benefited from a variety of approaches and resources that is believed to enrich the overall experience. One of the first aims was to enable a sense of connection and community at a time of detachment. This was achieved in a number of ways; the first step was through requiring students to work in teams of two. The second step was to use the opportunities of online education to the full extent. In this sense, both national and international guests were invited to the studio for lectures and critiques. Lastly, on special days such as the IFI (International Federation of Interior Architects/Designers) World Interiors Day and juries, both national and international guests were invited to the studio to share experiences with students that were shared on international platforms. Through an ambassador's residence project, second-year interior architecture students were able to experience aspects of their profession in an international environment. An enriched experience both in terms of structure and content was aimed to be achieved and the projects reflected these aims. The selected projects portrayed in the paper answer the requirements in full, are parallel to the context, and reflect the key criteria of the project. A questionnaire was applied to the participating students to gather deeper insight into their studio experience. Limitations include the number of participant students, and thus, further studies may include larger groups of students, national

and international comparisons of experiences as well as studio output. Despite the large-scale catastrophe, findings show the benefits of increased online interiors community activity in the experience of the students as well as being reflected positively to their projects. These events have also benefited the instructors' connection to the studio. Overall, the interior design studio is a dynamic environment that needs constant research into its pedagogy, content, and overall experience, as the educational environment moves swiftly to online direction.

Keywords: Interior design studio, Interiors community, Internationality, Sense of community, Identity, Virtual design studio, Concept building.

1. Introduction

Design education requires a highly interactive process between students and professors, including the offering of alternative design solutions (Sagun & Demirkan 2007). Physical design studios (PDS) and live critique sessions are crucial parts of the design education curriculum. It allows students to expand their socio-spatial capacities simultaneously. Due to the global COVID-19 pandemic, all teaching and learning activities needed to be carried out remotely in a virtual design studio (VDS) (Kusumowidagdo & Prihatmanti, 2022). The impact of abandoning synchronous and physically immediate access to students undermined what turned out to be a significant structural element of design education for many design instructors (Jones & Lotz, 2021).

Since there is no flawless plan or design, designers are familiar with working with ambiguity, complexity, and the whims of real-world situations (Jones & Lotz, 2021). As an effective pedagogical approach and technology, online learning is widely used in higher education (Park, 2011) and the pandemic offered an opportunity to consider the growing trend of virtual design studios life (Iranmanesh & Onur 2021). Within the context of the second year studio at Izmir University of Economics, Dept. of Interior Architecture and Environmental Design, the focus is "concept building", benefited from a variety of approaches and resources that is believed to enrich the overall experience to use the opportunities of online education to the full extent within the strict confines of the COVID. With this in mind, discussions on national identity and how to create a concept that was based on what a country might want to represent

in a host city while designing an "Ambassador's Residence" and the materialization of those concepts as design projects for residences for France, Finland, Japan, and Netherlands. Each project reflects a research-based approach on the culture of host and guest countries and their depiction without simplistic or superficial representations that might be defined as "kitsch" was another challenge to overcome in this studio. The project was one of international collaborations that was possible through online platforms and introduced a variety of scales to the students throughout the course of two semesters. This study aims to provide insights and strategies to create a deepened understanding of interior architecture and an increased sense of community crucial for interior architecture education at the time of distance education and isolation.

2. Online design education and the covid-19 pandemic

Advances in digital technology have revolutionized the education system, requiring it to be integrated with educational technology, and the global pandemic has hurried the transition to digital learning and teaching (Dreamson 2020). Physical methods of teaching needed to change rapidly, thus it was not always easy to plan ahead and prepare for the development of teaching materials. Methods and materials for emergency teaching emerged, and for many, responding and reacting that was practically an emergency which later became the routine for teaching. (Winters, 2021). In fact, there were already a few institutions that provide online and integrated distance education (Jones & Lotz, 2021). However, even though the pandemic ends, it is quite likely that the altered landscape will not restore to its previous state since institutional systems and

norms for online education have been transformed for both students and educators (Dreamson 2020).

The interior design framework is established on design studio education as a core process of “learning by doing” (Schön 1981) and encompasses a wide range of representations (visual, verbal, tactile, and written), evaluation types (design reviews, juries, and studio work), and teaching methods (desk/individual critiques, group tutorials, and lectures). Therefore, the design studio is certainly a place that has the capacity to inspire, and enable programme staff to engage with students in a uniquely intense learning experience (Spruce, 2007). Naturally, the teaching methods of the design studio have significantly changed over the years, and various digital design-teaching instruments, such as video lectures or discussion boards, are now used as supplements to the classic design studio (Alawad 2021). According to Iranmanesh and Onur (2021) in the limited time window that the COVID-19 shutdown possibly enforced virtuality on design studio education and gave the opportunity to the hidden promise of VDS (virtual design studio) to blossom. As a virtual teaching environment, an online design studio is a place where the instructors and students meet, which means that there is typically group discussion rather than single communication actions and utilization of Virtual Design Studio (VDS) to the fullest is considered effective and efficient particularly for this project due to international and collaborative nature of the project.

Higher education courses in art and design have been moving away from practical learning to virtual learning for more than ten years, and this shift is still progressing currently due to the pandemic (Kusumowidagdo & Prihatmanti, 2022). Several scholars have studied the concept of VDS over the years, concentrating on different aspects of design education (Iranmanesh & Onur, 2021; Saghafi et al., 2012; Jones et al., 2021; Winters, 2021; Lotz et al., 2015; Rodriguez et al., 2018; Broadfoot & Bennett 2003; Cheng & Kvan 2000). In their seminal work, Saghafi, Franz, and Crowther (2012) discuss nine different

aspects of physical design studio (PDS) and VDS, which are: culture, community, space, technology, pedagogy, assessment, content, process, and outcome, and each helps educators comprehend the full extent of the current and forthcoming landscape of design education. This preliminary structure was provided as a fundamental tool to be used in deciding how to conduct the evaluation, analysis, comparison, and application of diverse environments for design education (Saghafi, Franz, & Crowther, 2012). These diverse aspects have been discussed lately by several scholars together or individually to deeply understand, review and study. For instance, Fleischmann (2019) conducted a study on a fully online design studio and discovered that the majority of students appreciated the fully online learning experience and that design teachers were satisfied with the achievement of the students. According to Alawad (2021), students appreciated that they could construct their own study schedule, learn, and complete projects at the pace that worked best for them due to the general flexibility of online delivery. The “Ambassador’s Residence” project focuses more on the positive and negative aspects of the online education process and the use of technology and discusses how students and instructors handled these concepts together over five different projects. There are also concerns that design education has not been thoroughly examined in terms of online learning until this global pandemic hit the world (Dreamson 2020).

On a fundamental level, it appears that the pandemic hinders educators of opportunity to participate in discourses and increase the quality of online education since there is no transition time or drastic change. In reality, educators and learners have been brutally confined online, and, more importantly, pedagogical engagement with education in the online networked learning environment may remain static, undiscovered, and unshared (Dreamson 2020). Even though VDS’s advantages have included a broader and more interdisciplinary approach to learning through collaborative but individual exploring possibilities, there are few aspects in VDS that

do need to be addressed, including a weak social interaction and diversified basic knowledge (Arora & Khazanchi, 2014). Therefore, peer learning also becomes one of the important issues that needs to be addressed.

Schön (1985) noted that learning in the design studio begins with ill-defined challenges, which is a common feature of professional education, and found that learning in the studio progressed through a process he defined as “reflection-in-action”. He draws attention to the exchange between a student and a tutor to demonstrate his findings on studio teaching.

Ideally, the design studio should function as both a learning centre and a complex social entity for collaborations as other learning environments. Design studios are the places that simulate genuine situations in design education. The critique process at a design studio is much more than a lecture; it is really a social interaction between the teacher and the students as well as among students. Therefore, communication is a significant aspect of a design studio (Deasy & Laswell, 1985; Demirbas 2001 cited in Demirbas & Demirkan 2003).

During the pandemic some borders closed, yet others were opened up, allowing for international collaborations amongst colleagues. As a community of design educators, we had a unique opportunity to reshape the interpretations of participation, agency, emancipation, and belonging in order to effectively address current issues and difficulties like representation and inclusion (Jones & Lotz, 2021).

3. On collaboration and sense of community

In terms of motivation, efficacy, learning, and satisfaction, students assessed in-person collaboration significantly higher than online collaboration, although both types of collaboration generated the same results (Cho & Cho 2014). To improve and ensure the quality of online design education, Alawad's study sought to identify students' real-world experience in fully online interior design studios and investigate if such experiences vary

according to students' educational levels (Alawad 2021).

According to Alawad (2021), students' ability to communicate with their tutors is determined by their skill level in digital media, including the structure of VDS. It is necessary for both teachers and students to be acquainted with a series of innovative digital technologies in order to conduct an effective VDS. The quality of student learning will be maximized through increasing connectivity within the online learning communities (Northcote, 2008). Online education enabled students to focus on the specific problems posed and led them to be more critically analytical and self-reflective than in a conventional design studio (Alawad 2021).

In an interior design studio, students can also engage in peer collaboration, which is a common practice in the real interior design community (Sagun & Demirkan 2009). Students also learn how to cope with diverse opinions and viewpoints, lead the project positively, along with scheduling with team members, through participating in collaborative projects in the design studio (Hennessy & Murphy 1999). In recent times, a significant number of interior design firms collaborate around the globe using new technology, including synchronous and asynchronous communication tools. As a result of this trend, interior design students' standards have escalated. Therefore, to cultivate positive attitudes towards online collaboration, it is important to investigate students' perceptions of online collaboration experiences. Thus, collaboration in the design studio is an essential experience for students. Moreover, collaboration is one of the critical competencies that interior design majors are expected to develop throughout their education; unfortunately, a minority of students is capable of collaborating with others online (Cho & Cho 2014).

For distance learning students, an optimized discussion board is essential for collaborative learning and for reducing emotions of isolation and detachment (Alawad 2021). Researchers

have shown a high degree of satisfaction among students while working together in person rather than online. Nonetheless, there was no substantial difference in student performance between the two types of collaboration. Furthermore, the findings highlight the importance of providing an adequate online interface for design collaborations (Cho & Cho 2014). The second-year studio program explained in the next section aims to encompass a strong sense of community through an enriched studio experience both in terms of structure, content and enhanced communication under the challenging conditions of a pandemic by turning into its advantage to become more global and connected with the design community.

4. Methodology

The method involves the analysis of second year interior design studio projects, according to the formation of a conceptual statement, interpretation of abstract conceptual ideas into realized and concrete form (composition, layout, and reflection on all project decisions from the largest scale to the smallest detail), conceptual development, and finalization. Through collaborations with national and international partners and designers, the aim was to recognize these features and discuss variations on the theme. Moreover, surveys were done with students to understand their point of view on the process and the extent to which the studio expectations and requirements on the projects were responded to. The survey was considered as an additional quotes that supported the findings. Semester-long discussions with students helped tailor the project according to their comprehension.

In the second-year studio, it is significant to provide to students a sense of “interiors community” that they are often not fully aware of. The studio began with a notion to realize this on different scales, local (city-scale), national, as well as international. Through discussions of identity regarding the profession and project focus, especially at a time when only distant connections could be achieved, these collaborations through the VDS explained in this paper, this became an even stronger

priority. The project brief and components explained below all carry this aim.

4.1. The VDS Project

In the first semester, the project was introduced as designing a “Foreign Ambassador’s Residence and Public Centre in Izmir”, which is a complex that is formed of two significant functions: residence and public centre of a chosen country at the Izmir Culturepark fairgrounds. The building space is the Painting Sculpture Museum, Culturepark Art Gallery, close to the Lozan Gate in central Izmir.

The following quote was discussed in the studio as a beginning;

“Today, designing diplomatic facilities requires architects to engage the conceptual and physical requirements for sustainable and innovative buildings, including the ways in which to incorporate public space and civic engagement. While previous designs may have once resembled fortresses and bunkers, new diplomatic buildings are created to comply with strict security standards while opening up to local programs and conditions...”
(<https://architizer.com/blog/inspiration/collections/embassy/>)

This building type was explained as one that brings two functions together, and therefore the two distinct parts should be connected, yet separate at the same time. Well-known examples include the Turkish Embassy in Tokyo, designed by Kenzo Tange.

Ambassador homes and embassy spaces are firstly the homes of a consulate or ambassador, and secondly the connection point with the culture of the host country. There are several issues to consider such as; representation of another culture in a country without being simplistic, issues of identity, and the variety of functions to be covered. The interior design of these spaces carries specific importance in responding to these needs.

The following points below were significant for the project context. First, the project location was chosen as a space in the city centre, easily accessible by all students. The public building is a well-known museum and therefore the students could more easily focus on adaptive reuse. Second, the project location is in the Izmir Culture Park which has a historical significance which will be explained in the paper. Moreover, the project was introduced at the 1/200 scale in the first semester, and brought to 1/1 scale by the end of the second semester.

This necessitated a comprehensive approach to design, a powerful concept that would be valid and applicable at each scale, and a consistent language throughout the various needs and scales of the project.

Taking into consideration the close surrounding of the building with its landscape design enabled the design of a close connection between the exterior and interior. The climate, plants, direction of the building, and circulation of people within Culture Park was studied in



Figure 1: Culturepark and Izmir Art and Sculpture Museum, Turkey, Izmir, Alsancak
Sources: <https://www.Izmir.art/tr/kulturpark-sanat-galerisi> <https://Izmirinrenkleri.com/kulturpark/>

detail with guest lecturers. Lighting was another significant element introduced with lectures and detailed lighting scenario building assignments. While the first semester focused on a more abstract approach and building the scenario, the second semester focused on carrying the concept to furniture design, textiles, and selection of industrial design elements and accessories and the design of details. The projects that are presented in this paper were also the most responsive in this respect and most diverse in terms of explaining the scope of the project. Students also had to investigate the location considering several layers; Turkey, Izmir, Alsancak, and Culture Park; as well as researching the chosen country and its culture.

4.2. Project Definition

Embassies, and other representations of countries such as, ambassador's residences are significant places that represent a country in another foreign country and thus carry characteristics of both the represented and the hosting country. The building and interiors need to reflect the related country's culture, but adapt to the existing culture at the same time. Therefore, students had to think about how these two cultures come together.

The public centre was devised as the space for the reception of visitors coming for a variety of cultural events and activities, and acts as the place that creates a "first impression". The physical characteristics of this area may easily reflect on how the country is perceived, and therefore carries great significance. Therefore, students had to think about both the cultural identity and the first impression. Ultimately, students needed to create a space that was contemporary, that combined the cultural and traditional in an abstract and refined way.

Students were required to respond to the following space and program requirements. Regarding the public areas, students needed to do research on public events, meetings, and gatherings that may be held at an ambassador's residence. Students were responsible for the reception area, resting-meeting areas, waiting areas, exhibition or other specialized areas, entry area/ security, café, library, office area,

storage for personal belongings of personnel, and other specific needs according to their scenarios. In the private areas, students were responsible for doing research on the actual ambassador, research on the standard family structure of the chosen country, planning of the whole house for its inhabitants, entry area, living area, bedrooms, working spaces, kitchen(s), bathroom(s), various storage spaces, and other specific needs according to their scenarios.

When students were writing their scenarios, they were asked to consider the following; Understanding the function of a cultural centre; (Re)creation or reinterpretation of an identity; Scenario (according to the user profile); Whole volumetric space; Surfaces including the floor, the walls, the ceiling (new boundaries can be defined by your proposal); Planning and Programming; Connections between spaces; Furniture; Lighting (Artificial lighting and Daylight); Materials and Textures; Colour; HVAC, plumbing, acoustics; Connection details; Consideration of privacy issues (Visual, Audial, and other); Exterior-interior connection and planting solutions; Approach to the building and facade expression/characterization; Artwork; and Wayfinding-circulation. The evaluation criteria were based on the depth of analysis and research on the chosen culture, success in use of design principles and spatial knowledge, innovation, functionality, feasibility, aesthetic values, and presentation.

4.3. Studio Process

The students were paired in groups of two in order to enhance communication during the period of isolation that was caused by the long-term two and three-week lockdowns that took place in Turkey in 2021. The COVID-19 pandemic which necessitated completing the whole year online and the sense of community through national and international online meetings were beneficial to strengthen bonds within a time of uncertainty and illness happening in several students' lives. Thus, there were several opportunities for the development of the studio culture enabled by online connections.

A main difficulty for the instructors was in getting to know the students. Although every course was structured to have a general meeting before instructors and students dispersed into their “breakout groups”, because some students refused to turn on their cameras or actively take part in the class discussions, there was a difficulty in combining the students’ appearance, name, and project. So much of the studio culture places significance on close contact and understanding deeply a student’s character, design ability, and strengths and weaknesses. Opportunities for closer connections were held through individual meetings with students outside of the in-studio critique session where instructors and students can converse freely about the student’s progress.

The online platform also enabled creative collaboration with national and international colleagues, which reflected positively on the students’ understanding of the interiors community as well as enriched the studio. The studio collaborated with a Professor and his 13 students from Chiba University, Architecture Department, Japan. The Japanese team was with the studio throughout the semester, and students collaborated with them and experienced different approaches to the same design problem. Moreover, the Japanese students visited the Turkish ambassador in the embassy in Tokyo, Japan and connected to the studio from their visit. This experience was also quite valuable to the studio as it was a real-life experience. As this was a cultural project, both Turkish and Japanese students benefited from this.

The evaluation criteria depended upon the elaboration of the concept and reflection on all decisions of the project; definition of the scenario that is parallel to the design decisions; depth of analysis and research on the chosen culture; understanding of the life of an ambassador; success in the use of design principles and spatial knowledge; innovation, functionality, feasibility, aesthetic values, and presentation. Students were asked to come to each class with their revised proposals and homework.

4.4. Projects

The project was a year-long topic that began with the selection of the country, cultural research, the definition of the concept, design of the site plan including landscape design and plant selection in large scale (1/200 and 1/100), and creating the general layout and scheme of the interior space in the first semester. The second semester involved a full analysis and design of the interior space, starting from the general scheme and carrying the conceptual decisions to the smallest detail. This semester focused on private and public spaces within the interior space, designation of subspaces and rooms, interior detailing and finishes, including all material selections, textiles, lighting, furniture, programming, and budgeting. As the students worked on the same project in both semesters, it was possible to carry a general idea applied at the largest composition scale, considering the location and history of the building and site and planning the approach to the building, to the smallest detail.

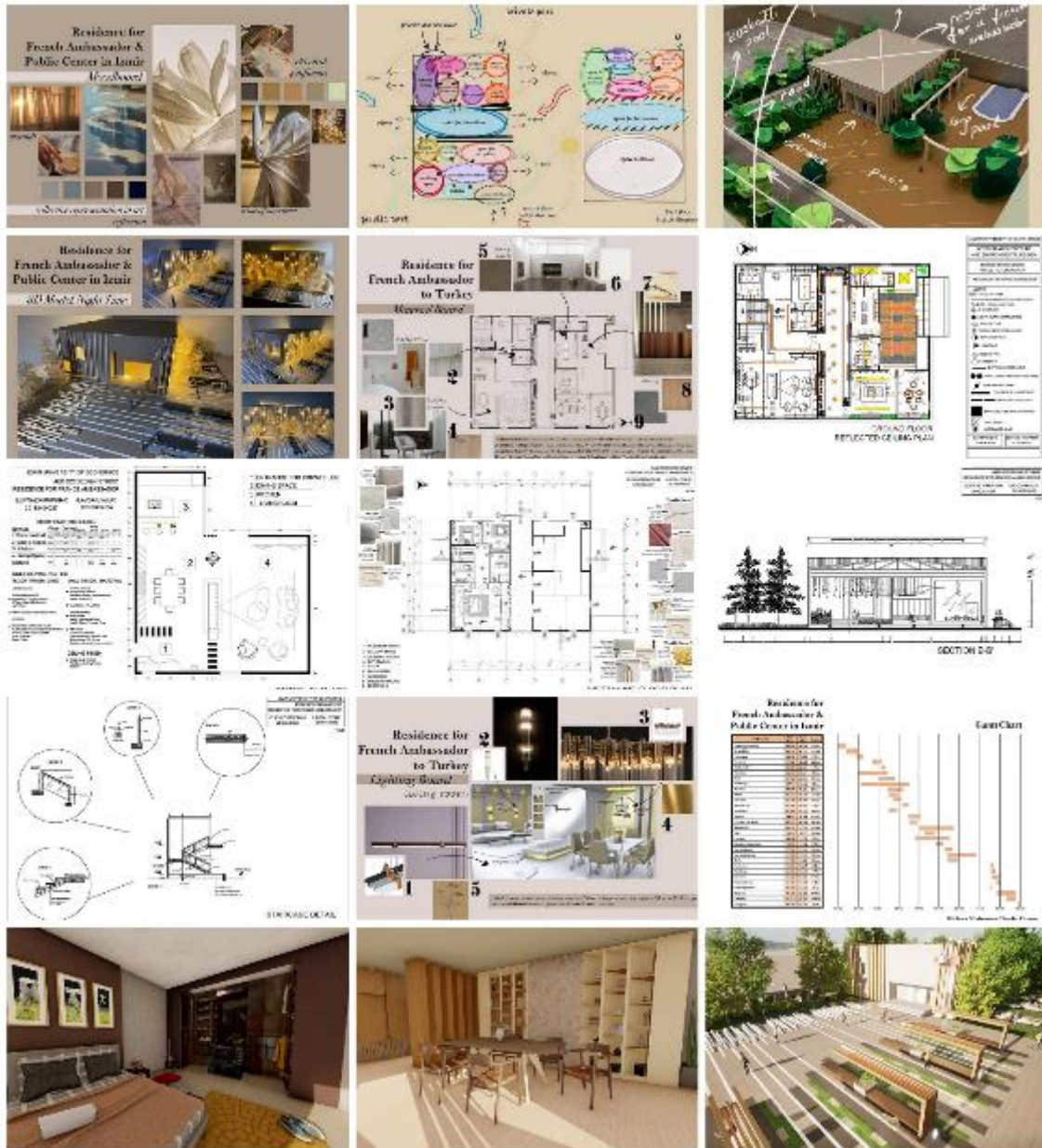


Figure 2: Project 1- Residence for French Ambassador to Turkey

This particular project began with the semester's first research through the representation of a nation and the concept of creating different representations of art within daily life narratives. The idea was sensing every detail in life as a corollary of art, as seeing the aesthetic way of figuration. In this manner, the project rotated around the idea of creating a design with

the cultural identities of both Turkey and the chosen country (France), including some details and symbolic matters such as privacy that both cultures were dignifying. At the second stage, students continued to work from a distance with their teammates and peers getting critiques and trying to continue from the exterior to the interior that described a transition of planting

with a green space. This idea began with the landscape organization together with the designed facade with planting elements. The openings of the building were designed in a way to correlate with the interior layout which affects the amount of daylight that the building took in. In the following stage, the spatial organization was developed with the idea of layers that were adapted to the functional arrangements in the space. The connections of the interior spaces were studied within the scenario regarding the hierarchy of the demands of the project. In the final stage, students were asked to share their project with all these three stages that were built up together, to compose a unique representation of the project that had two main functions with residence and public area as a virtual presentation. This also requires a different set of skills for presentation, communication, and the use of technological tools that they have had the chance to develop throughout VDS.

In the second semester, for the landscape design linearity was the important design principle that supported both the horizontal and vertical elements designed for the landscape and the facade of the building. The approach for the interiors was more about dealing with specific concerns such as built-in and mobile furniture, design objects, artificial and natural lighting solutions and more details defining the whole atmosphere.

Lighting design was a critical concern in the creation of both the general atmosphere and the reflection of the design that each space needed. Lighting scenarios were created for different time and spaces. For instance, the sitting area which is a reflection of the design language of

the whole project is aimed to preserve linear shapes. General lighting in artificial lighting is provided by linear luminaires. In the living area, general lighting is provided with wide-angle downlight fixtures recessed into the ceiling in order to provide repetition with light traces in horizontal planes. In order to emphasize the desired interior architectural approach with light, recessed mini downlight fixtures were chosen to provide trace lighting inside the niches. The recessed linear lighting elements, which are also designed to be used in the library, are intended to both emphasize the product to be exhibited and contribute to the luminous level of the space with indirect lighting. In addition to direct and indirect lighting, decorative lighting fixtures are the integration of interior design language and lighting design.

Control grouping of all lighting fixtures selected for the determined area was created in line with a scenario. Lighting scenarios for this project was considering the daylight, the decorative and furniture integrated lighting fixtures working together, only furniture integrated lighting fixtures will be switched and was designed in accordance with the use before sleep, with low light levels and by direct lights. Material selections, colour and texture decisions were the focus at the end of this period. In this semester, it was found that students could find more time to deal with design details. This might be due to the practical nature of VDS where meeting and communicating with their teammates according to their own study schedules, and instructors are easier most of the year.



Figure 3: Project 2- Ambassador's Residence and The Public Centre for Finland

At the first stage of the project, the project aimed to bring together the conventional Finnish lifestyle and the contemporary experience. While the private spaces of the building gave the user a warm and traditional environment, public spaces were designed to be more educational, experiential and informative for people from other nations.

Moreover, nature was incorporated in every aspect of the project; both physically and conceptually. Nature was the main concern for every material, texture and colour, where function was the primary issue with the understanding of the natural lifestyle of the culture of the chosen country. This approach was already in the basic understanding of Finland; the country that the students were

studying. Some activities were held such as; photography exhibitions, workshops, social, formal and informal gathering spaces. The private spaces were designed for tranquillity and relaxation.

At the planning stage, the students introduced an experiential walking path with a unique floor design and patio was introduced to the main entrance, in order to greet the visitors

approaching the building, while appreciating the landscape. On the facade of the building, coloured window application was used to get the daylight in that were connecting the exterior design language into the interior space, with a specific illuminating effect. Thereafter, the aim was to have spacious and flexible areas, concerning the main scenario and the related functions. The idea of flexibility was brought forward to bring comfort to the interiors by



Figure 4: Project 3- Residence for Japan Ambassador

maintaining a native simplicity, using natural materials, textures and colours. Various gathering spaces were designed for the public, especially in the social areas designed for multifunctionality and sharing information with visitors.

In the second semester, the symbol of the earth and the effect of the aurora, as an extension of the concept, were examined in material, texture, and colour decisions. Lighting design, thus, became the fundamental part of the design. Transparency provided the opportunity to benefit from daylight. The entrance was specifically designed to provide more flexible areas for various different activities like exhibitions, presentations, and meetings; a ceiling design with irregularly located pendant rails and magnet spots were used. The selected luminaires had diffuse covers and anti-glare qualities for visual comfort.

Regarding landscape design, the exterior green area was designed according to the species and properties of the green items, accurately. Moreover, it is possible to say that students preferred the presentation materials to be arranged mostly in horizontal direction in VDS to maximize the use of the screen and showcase many more details which was not the case for the physical studio.

The main aim of this project was to combine both traditional and contemporary Japanese style in a functional way. Zen Philosophy was chosen as the concept and the novel design approach and lifestyle of Japan determined the main point of view of the project by creating basic and pure spaces. Students working with Japan had the opportunity to interview and discuss their research and project material with online guests from Japan, which makes VDS more efficient and more multicultural with learning through collaborative yet individual exploring possibilities.

The second stage was held on simplicity and functionality, a contemporary approach with the traditional twist is adopted starting from the exterior and transitioning towards to the interiors. The exterior, which contained a

private garden, was connected to the interior through an interior garden located at the centre of the building. This area had both a visual and a physical relationship with the private and public parts of the interiors. At the third stage, linearity was seen in the overall design language of the building, which contained calming design elements with details generated according to the scenario. Furniture designs and material connections were defined by direct relations with the use of texture and colour, parallel to the interior design language.

In the second semester, the supplementary idea was the grid system supporting the idea of linearity. Some additional functions and traditional elements have been added and designed to strengthen the project to complement the overall design language. The lighting design has been studied in depth with scenarios for both artificial and daylight, which should be the core subject of designing a project. Different lighting scenarios for day and night are considered to realize different conditions of lighting concerns.

Creating layers was one of the aims and thus the depth and high ceiling volumes were emphasized through lights. Another significant aspect of the interiors was the authentic decorative lighting fixtures made of rice paper, which was specially selected to harmonize with Japanese culture. One of the most important issues in the selection of lighting fixtures, the selection of products per the standards for the external environment, is one of the highlights of this project. These students became more used to VDS in second semester and they were more proficient in communicating fluently through online platforms and developing their skills about video animation more suited to virtual studio by adopting a more immersive approach to present their project with a video in addition to still representations.

language that is inspired by the biophilic design principles. Water was emphasised both in landscape design and indoors as well as green surfaces and vertical gardens. Plants were widely studied as part of the biophilic design approach, which contributed to both exterior and interior areas. In order to accentuate the green areas, white horizontal and vertical surfaces were used, and smooth walking surfaces were designed above the water level. Biophilic design was integrated to every part of the project, with a strengthened connection between the exterior and interior through plants.

In the second semester, the improvements were mainly made in the functional and geometrical design phase of the landscape layout. At the very beginning phases of the project, the facades of the building were examined in detail, along with the site analysis. The movement of daylight is noted on-site analysis by examining it annually. The cycle of the sun and seasonal effects were also discussed and influenced the interior design decisions. The second daylight scenario was based on equinox dates and the indoor layout reflected the changes in the amount and time of light received by the interior volumes throughout the year.

A holistic project was created by associating the movement of this living, changing and evolving light, which is compatible with the biophilic concept. The daylight analysis, which was so scrutinized with site analysis, was supported by artificial lighting and met at a common point in landscape design. On the main walkways connecting the entrance area to the interior, 3-meter-high modern style lighting poles provided and the necessary light level for visual comfort. Thus, following the project concept, the importance of human-oriented design was emphasized.

Consequently, there are several common design and approach elements developed throughout the year. All five of the projects mainly focused on the sense of community and national identity while utilizing the opportunities presented by the virtual interior design studio. These opportunities include; adopting more immersive approaches to present their projects,

internationality of the studio and the opportunity to interview and discuss their research and project material with online guests, efficient communication between peers, being more multicultural with learning through collaborative yet individual exploring possibilities, students could found more time to deal with design details due to the practicality of the VDS.

5. Discussion and conclusion

The study aims to instill a sense of community to interior design students with ongoing discussions on identity, both in the professional and the project-focused sense, and to see these exercises as vital to the understanding of the development of a concept as well as themselves as interior designers of the future. Online studios appear at first glance to break the sense of community, therefore novel ways and an emphasized approach was necessary. In order to enable a sense of connection and community, to find novel ways to connect with their students, to foster teamwork to encourage students for peer learning at a time of detachment, this paper employs a literature review method to provide a foundation for analysing related findings on the concept of VDS, reports the process of the studio within the confines of the COVID-19 pandemic in 2020 with a restructured curriculum for the second year interior design studio in Izmir University of Economics, Turkey and conducts a survey to review by reporting the findings of a year-long interior design project.

The survey enabled collecting quotes and feedback from the students about their overall interior design studio experience to enrich the assessment of the design projects and the success of the methods. Moreover, this helped assessing the goal to have the subjects of the study to encompass and comprehend both *internationality, sense of community, national identity, virtual design education, the scale and detail, concept building according to the location and its value* considering their projects in particular. The students were asked to answer the following questions to evaluate the enriched experience both in terms of structure and content of the studio. Six students from the

projects that were reviewed above participated in the discussions and provided their points of view. The questions aimed to understand their insight regarding the sense of community for interior architects, the new opportunities introduced through online education, teamwork, conceptual approaches, location of the project, and working at different scales.

Table I depicts such fluidly interrelated subjects of this study and displays the students' insights as they are quoted. The overall experience was satisfactory considering each aim of the studio. Students indicated that the adaptation from the interior design studio to the virtual design studio was seamless. Since students were working as a team, they encountered certain communication difficulties at times and this created an extra challenge during the process. Some students preferred to interact online and turned the situation to their advantage by utilizing the innovative aspects of online education. Most students were pleased about the opportunity for lecturers and students from around the world to contribute and felt part of a wider interiors community. Therefore, two of the main objectives of the studio, to promote a strong community for interior architects and to strengthen the sense of community, were achieved.

In addition to these, the studio aimed to evaluate the new perspective to interiors and design education. Students indicated that the VDS increased interaction between the studio and students and guests from around the world. Even though few of them sometimes had trouble communicating with team members, the overall experience was satisfactory and they were content about the performance of the studio and the instructors' efforts.

Regarding the selection of a well-known and historic location and working on different scales along the year, due to the COVID-19 pandemic conditions the students had to challenge distance-related issues. On the other hand, selecting this location facilitated the accessibility of information and research while providing the students plenty of opportunities considering the richness of the environment and

the site. In addition to these subjects, asking students to develop a project from the site scale to the 1/1 detailing, materials, and budgeting stage encouraged them to use the acquired knowledge from complementary courses from their curriculum and provided several exclusively significant insights and knowledge about fundamentals of the interior design and a designers' responsibilities.

Today, the practicality of virtual design studios is really no longer an issue, and the attention has switched to ways of implementation and utilization of developing digital media as technologies have grown less expensive, more accessible, and an essential part of daily life (Iranmanesh & Onur 2021). Several of the studies that have been conducted about the use of online learning mostly in blended design studios have demonstrated that there are still issues to be resolved to guarantee their effective use (Chen & You 2010), whereas others have reported that online learning is capable of supporting traditional learning but still not replace it (Akar et al., 2012; Niculae 2011 cited in Alawad, 2021). Moreover, according to Dreamson (2020) findings demonstrated that teaching both online and in-person can build an efficient learning environment for non-studio classes while providing significant value to interior design education in terms of the teaching process. Tragic and continuous as it might be, the COVID-19 pandemic has brought about several new questions regarding the interior design studio which needs further research and questioning on several levels, adapting to new spatial and educational necessities.

Table 1 *Students' insights as they are quoted*

| Subjects | Student no.1 | Student no.2 | Student no.3 | Student no.4 | Student no.5 | Student no.6 |
|---|---|---|--|--|--|---|
| Promote a strong community for interior architects | <ul style="list-style-type: none"> * raised awareness of the profession * provided the opportunity to create a wider network * feeling a part of a global community | <ul style="list-style-type: none"> * requires collective action * studio encourages us to work and act collectively | <ul style="list-style-type: none"> * increasing the ability to work collaboratively within the department * keeps students spirited and encourage them to work for better | <ul style="list-style-type: none"> * studio put a lot of effort * could not achieve this fully due to the pandemic and VDS | <ul style="list-style-type: none"> * community enables us to work together as a team * realized what we are more talented in, and what is our active roles in the community | <ul style="list-style-type: none"> * thankful to the team for focusing on this issue and trying to create this environment for us |
| Strengthen the sense of community | <ul style="list-style-type: none"> * gave the greatest support during this difficult adaptation process * a part of events celebrated around the world * met guests with different professional branches and expertise | <ul style="list-style-type: none"> * in this process where we lost our connection with the outside world, these events and meetings actually united us * enabled us to improve ourselves | <ul style="list-style-type: none"> * visitors from different fields of expertise can enable students to view their designs in a wider context | <ul style="list-style-type: none"> * we aim to create united community * including the other professions from the faculty I could be a better approach | <ul style="list-style-type: none"> * enables us to gain vision * gathered opinions of experts from different cultures or backgrounds * we exist stronger together | <ul style="list-style-type: none"> * meaningful for me to contribute in some way * very exciting, zoom meetings with the university in Japan, and a designers from the other side of the world * wish to be more connected face to face with students from |
| A new perspective to our interiors and design education | <ul style="list-style-type: none"> * took advantage of online education at maximum * we were in contact with students abroad * studio has improved us and created awareness | <ul style="list-style-type: none"> * pushed us to be more creative about the opportunities around us * spending time in indoors constantly has led us to rethink and question the space as a designer * the online study rooms on Blackboard helped to bring us together again | <ul style="list-style-type: none"> * pandemic improved our ability to produce alternatives * the online processing of the lessons also contributes to our communication especially in English | <ul style="list-style-type: none"> * with the pandemic, my perspective on interiors has improved a lot * aesthetic concerns were more intense for me before, I now consider more about functionality and comfort | <ul style="list-style-type: none"> * access to all useful online platforms for the best educational and the most comprehensive insights * learned how to communicate and meet with people online * studio was always accessible | <ul style="list-style-type: none"> * we use the advantages of technology quite a lot |
| Virtual design studio (VDS) | <ul style="list-style-type: none"> * increased our interactions with each other * work and stand as a team better than before * in constant contact with both our instructors and our friends * increased our sense of responsibility | <ul style="list-style-type: none"> * we implemented the VDS system in the most beneficial way * in contact with the instructors more one-to-one * the virtual process was much more difficult in terms of group work due to technical problems | <ul style="list-style-type: none"> * working as a team in the virtual studio takes more time * good communication with my teammate in the VDS improved us a lot | <ul style="list-style-type: none"> * thankful for the effort and willingness of our lecturers and guests * increased the in-class discussions * students will feel more belonging to the studio | <ul style="list-style-type: none"> * instructors were always available * good communication with our guests * In addition to instructors, guests and colleagues, technology has always been part of our team | <ul style="list-style-type: none"> * presented a perspective or to listen to different points of view * opportunity know the opinions and experiences of people from different countries, cities or universities * some disagreements and |
| National identity and the representation of a country | <ul style="list-style-type: none"> * understood the definition of national identity * paid the attention to blend the host and guest culture | <ul style="list-style-type: none"> * learned the cultural and social characteristics of both countries * tried to adopt the countries down to the smallest detail * inspired by many artists who grew up in those countries | <ul style="list-style-type: none"> * researching the culture of a country, the lifestyles of people and the symbolic factors of the country * very beneficial in the long run, we have strong data and limit | <ul style="list-style-type: none"> * inspired by the character of this country * preferred the country I visited for more relevant design | <ul style="list-style-type: none"> * researching the social and cultural structures of the country * collected data from the local sources and merged the them into our design strategy | <ul style="list-style-type: none"> * very fruitful * understanding the philosophy, lifestyles, interior designs and the culture * reading articles, a philosophical research combined with Turkish culture |
| Location | <ul style="list-style-type: none"> * important location facilitated the accessibility of information * many factors such as human interaction, circulation, architecture etc. * multiple elements, structures and environmental conditions | <ul style="list-style-type: none"> * such a central location where most events take place pushed to think in a multi-dimensional way * chance to go and experience the location * helped for a more realistic design process | <ul style="list-style-type: none"> * Kültürpark has unique features * the nature of Kültürpark accompanied many different concepts created by the students very well | <ul style="list-style-type: none"> * disadvantage for those living outside of Izmir like me * a location outside of Izmir would provide equal conditions to all | <ul style="list-style-type: none"> * a historical and an accessible place * easy to adapt ourselves to the project * toured the area and this strengthened our research | <ul style="list-style-type: none"> * more effective for us * blending the culture of the city with the culture of the country we chose, having done more research on Izmir and the opportunity to see the building |
| Different scales | <ul style="list-style-type: none"> * working at different scales guided me in perceiving the real size of the space * ensured the interaction between large-scale spaces and small-scale spaces, acting in harmony | <ul style="list-style-type: none"> * working in such small details has improved us in many ways as an interior architecture student * helped us to keep user in mind | <ul style="list-style-type: none"> * working at different scales helped me a lot in the process of going from general to detailed * every detail of the space created a more harmonic result | <ul style="list-style-type: none"> * nice to use the acquired knowledge from complementary courses from our curriculum in the process * nice to combine the knowledge with our sense of space that we developed according to the pandemic conditions | <ul style="list-style-type: none"> * considered all the different scales * implementing even the smallest detail in the project * provided a perspective how to anticipate and eliminating every problem | <ul style="list-style-type: none"> * following a path from the general to the specific (from large scale to small scale) contributed a lot * had such an impact that seeing the real life application * a special and beneficial experience |

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