

The SmarTuria HUB Project: Transformative Education Experiences Outdoors

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The quality of public space is the result of everything that takes place in it, and therefore, it has to be part of a dynamic process in order to respond to the needs of people and to the constantly changing situations. From this idea the study and analysis of public space has to be done through active synergies, which favour its understanding by the public and their active and positive participation, enhancing the relationships between function/form/structure (Habraken, 2000). In addition, competency-based education requires methodologies that place greater emphasis on learning and the link between practical skills, knowledge, motivation, emotions and attitudes (Haak 2017), which requires a disruptive approach (Dygert 2017).

The SmarTuria Hub Project is being an academic experience, which started five years ago taking as scenario the public park Túría gardens in the city of Valencia (Spain), with the aim of experiencing with the students the methods and strategies of the European urban labs (ENoLL, 2013) and the open design, where the approach of integrating the users, is the key for reaching more innovative, inclusive, sustainable and adapted design solutions. The goals of the urban living labs are “innovation, knowledge development for replication and increasing urbans sustainability emphasizing the need for supported, local solutions” (Steen and Bueren, 2017 p.11). To reach these goals in a real-life use context, co-creation techniques with the actors (users, private and public actors, institutes...) are the basis to understand their needs and expectations, including them in the innovation process, iterating with the feedback gathered from use and evaluation, and empowering people for decision taking. From this approach, students internalise that creating tools for expression and participation of the users is essential and it is one of the means to achieve a more active role in the design process (Kristensson 2004).

INTRODUCTION. THE TURIA PARK AS AN URBAN CONTEXT

The Turia Park in Valencia is an alive scenario, which deals with accessibility and inclusive design issues, open air and healthy practices, and attitudes about nature and local culture. According to different sustainable development goals, it is an excellent environment to develop appreciation, criteria for innovation, and spread good design practices. This urban park is the result of the Turia’s riverbed space that cross the city, when it was derived of its water in the sixties after a tremendous flood. Since the eighties, a territorial metamorphosis it has become into one of the major urban parks in Europe, a perfect scenery for nature and social relations.

The Turia Park nowadays, responds to the contemporary concept of sustainable city that is active, healthy and alive (Puyuelo, Merino and Rodrigo, 2017). Furthermore, this urban park has the potential to be an example of the new inclusive and sustainable –growth paradigm, and a context of social cohesion.

Due to its location, length, conditions and characteristics of this trail, the Turia Park responds to the trends of the Smart Cities and Smart Mobility, giving priority to “soft” transport services such as cycling, a healthy city, public space as a gym, the city on a human scale, strengthening local identity and tourism. this place coincides with some of the trends of Smart Cities and the Smart Mobility (Casado et al., 2015), by placing priority on “soft” transport services such as cycling, jogging, healthy habits, openair gyms, the city on a human scale as well as acting as a means for enhancing local Identity and Tourism.

This urban park, its background and current state, makes a singular environment, due to its length and its spatial configuration, connections between the different áreas of the city, the urban services and furniture have and, above all, its quality and intention of fostering relationship with a huge diversity of users. This huge linear park is structured from its entrance head in the city in 18 stretches, that arrive until the Port crossing the city from west to east. These sections, have different characteristics with recreational areas, which acquire usefulness and sense in the global context and where the pedestrian and bike routes interrelate them in a continuous.

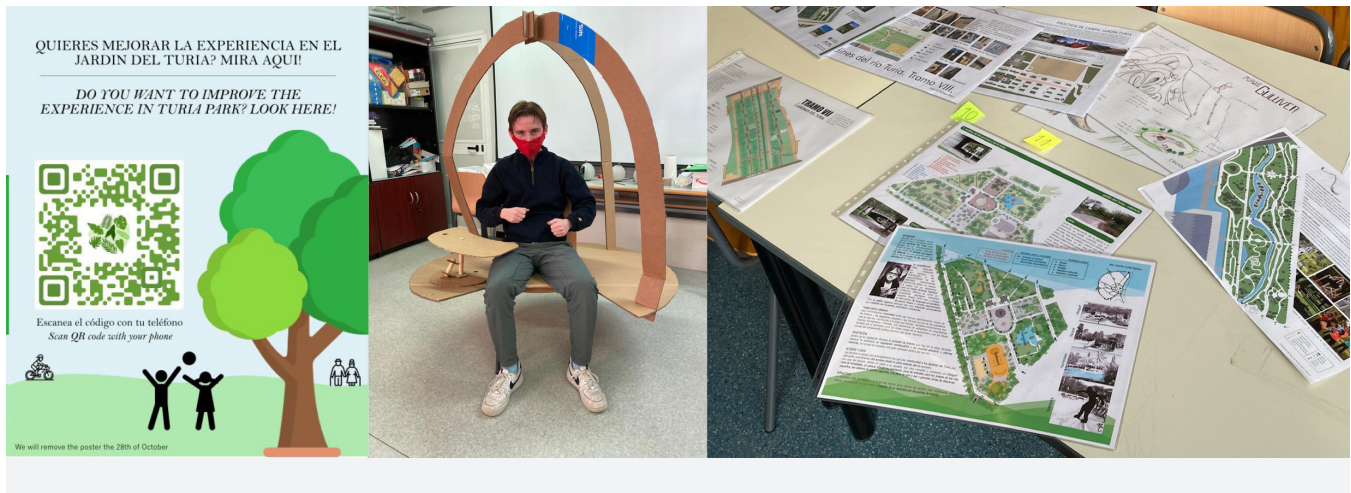


Figure 1. Methods and tools used in the learning proces. Source: The authors.

This urban field works-driven investigation project aims to explore and to think on a new model for obtaining innovative design criteria, involving learners and different users in outdoors analysis and projects. This approach leads all the participants through activities, to appreciate from real life perspectives, apply them to possible revisions in their own teaching, share them with others and apply them in their design projects. As a context for collective life, public space implies public domain, an anonymous, costless and free use, which must guarantee the full accessibility of all citizens regardless of their physical or sensory characteristics, as well as the essential multi-functionality that promotes their social side. These parameters are the real factors to evaluate the quality of public space according to the intensity and quality of the social relations it facilitates. That means its ability to stimulate and promote a sense of identification, expression and cultural integration (Merino y Puyuelo, 2020).

All these experiences trigger critical thinking, involving observation, study, empathy, understanding ideas behind the constructed space, and practices when examining the relationship with people and uses.

METHODS: DESIGN THINKING INTO PLACE

The Design Thinking methodology is proposed as the basis of this course. Design thinking is a non-linear, iterative process which seeks to understand users, challenge assumptions, redefine problems and create innovative solutions (Brown, 2008).

Starting by building a stakeholder map to get an overall view of the Turia park, and the particular role of the multiple áreas and users, to explore opportunities and clarify in one hand, the management and drivers of change at the this urban context. In the other hand, for creating significant insights of the users,

The five phases of Design Thinking Method guide the Project. Emphatize spending time at the place talking with the different groups of users, sharing historic works, projects and field studies

in the different áreas of the TuriaPark. At this stage ethnographic methods, communication and representation technologies, bring more possibilities for design thinking, understanding and shaping the environment, getting the implication of the groups of users at different levels. Inviting authorities, companies and workers. Although the client is the city, not an individual, we can empathize with the place as context by sharing all these contents.

Define phase: Sharing information from the studies and surveys, results and proposals to ask for devising ideas for connecting with needs and ideas focused in the park. Qualitative info is taken spending time at the place with the groups in different áreas/scenarios and doing an Inventory of facilities and features. Individual Journey maps, "storytelling from own knowledge (sports, meetings, activities, plants and gardening...)" and motivation matrix are used. Ideate Participants will use brainstormings to collect Users journeys...

Depending of the course and the aim of the project of each year, different methods, prototypes or scaled models are build to be display and tested with the users (Figure 1).

Although the main learning context is the park, where different class sessions are held, there is also the "Las Naves" Social and Urban Innovation Centre of the València City Council, which provides access to certain activities and contacts related to different urban areas. It also offers spaces for analysis and co-creation to develop meetings and activities with different audiences.

The main methods applied are ethnographic and direct observation in fieldwork, personal and online interviews for collecting the user's voice, to know the degree of satisfaction of their experiences in relation to existing installations. The European Network of Living Labs (ENoLL, 2013) helps to understand the complexity of this approach and give tools to start with this sort of research.

These direct observations and verbal interviews with users serve to get to know the user in depth and to detect issues that will be key to the approach of design projects. General questionnaires have been carried out on facilities and uses, as well as specific questionnaires on certain aspects such as accessibility, perception of safety, their wishes regarding a particular aspect. They were invited to draw up informal images of possible solutions to issues and graphic documents were produced to facilitate their assessment of the design of certain street furniture facilities.

The use of open questions have the objective of detecting needs and obtaining suggestions to improve the equipment of the environment. The online surveys aim to understand the service and design preferences of the target audiences and have been addressed to people who live in the city and know the place directly or indirectly. In a general approach, people are randomly selected and sought to cover diverse profiles of local users: citizens, young sports people, senior citizens and tourists/visitors and in-house analyses, which can subsequently derive on useful approaches for the design project.

Data obtained combining these methods, trigger a more adjusted analysis of the relationship between the user, the context and

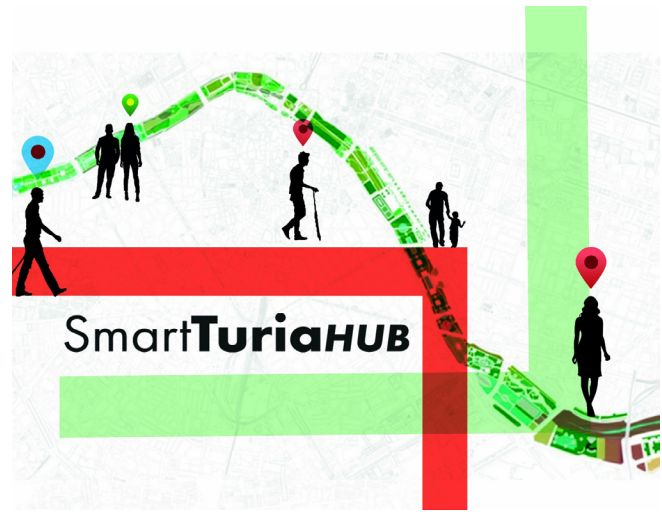


Figure 2. The image of the project shows the length of the park. Source: Own elaboration.

the role of the designer, while showing and sharing the possible shortcomings and aspects to improve, that will guide future intervention strategies.



Figure 3. Graphic of the study of the field work in the V&VI areas. Source: Miriam Burzuri e Irene de la Fuente.



Figure 4. Sensoria project. Source: Irene de la Fuente.

TRANSFORMATIVE EXPERIENCES OUTDOORS

The SmarTuriaHUB (Figure 2) is a learning experience to enhance the main role of Design in the habitability of public places, communicating this idea to the students, citizens and stakeholders of this particular urban site, combining analogical and digital research, and introducing these recent changes in the “modus operandi” of our world, where information and participation are a fact. The students have to define their own brief and practice some user’s research methods to focus on improving activities, inclusión and experience the place through design.

Thus, Design is the core of these experiences since the project finds its roots on previous studies and briefings for design projects around this urban park, in order to improve its quality and adaptation.

The project captures four fundamental aspects that enhance the design of open spaces as a background for co-creation and innovation:

- 1- The quality of the Turia park as public context for design and design education.
- 2- Its importance for personal wellbeing, sense of belonging and community identity.
- 3- The focus on inclusive design, the elderly and the variety of stakeholders involved.
- 4- The active participation of groups of users in the design of sustainable solutions.

The Design Thinking method is essential to link these aspects and the participants_ experts, teachers, architecture and design students, different users in order to understand needs, challenge assumptions, redefining problems and creating innovative solutions.

The knowledge gained in this context is new because of its quality as a unique and changing urban context, its unique functionality and the great diversity of users that keep it in

Conecta-T

Descubrir la teua comunitat des de dintre

¿ABURRIDO?



¿Ciego ante una ciudad llena de posibilidades?

¿TIENES TALENTO?



¿Algo que mostrarle a la sociedad en la que estamos inmersos?

¿POR QUÉ NO EXPLOTAMOS UNA SOCIEDAD Y UNA CIUDAD LLENA DE POSIBILIDADES?

5 Ágoras
Infinidad de eventos

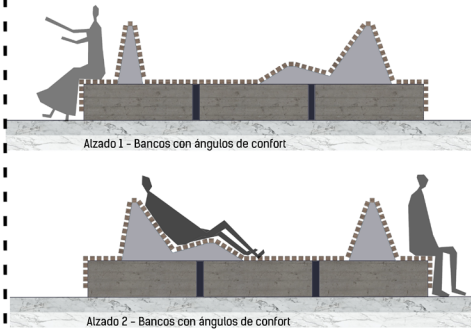
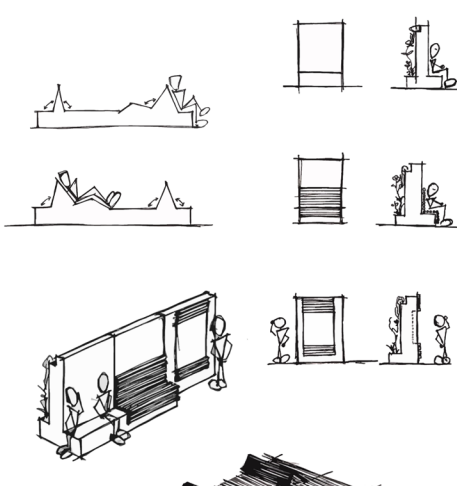
MISIÓN Conectamos personas con intereses compartidos a través de espacios urbanos de calidad.

- Deporte
- Social
- Arte
- Música

¿QUIÉN ERES?



1. Descarga la APP Conecta-T
2. Encuentra el Ágora que te haga vibrar
3. Disfruta de tu ciudad



Una vez identificado nuestro objetivo, pretendemos crear los espacios urbanos flexibles y dinámicos, capaces de albergar la variedad de eventos que la sociedad demande.

A parte de las actividades que allí se realicen, también es importante crear espacios de descanso y de calidad para que cada Ágora pueda ser utilizada en cualquier momento.

Por este motivo, sobre las bases de hormigón, se genera una piel de madera que aporta dinamismo y confort al espacio. Esta madera aporta calidez y jugando con los ángulos ergonómicos de confort, generamos una serie de bancos flexibles para todos los usuarios.



Módulo 1. Este modulo de pared vertical, es el más básico, ya que únicamente contiene un banco "desnudo" de hormigón, que da estabilidad e interacción.

Módulo 2. Este modulo además, se recubre con la piel de madera para aportar calidez. En todos los casos, por la parte trasera aparece una pared vegetal con únicamente dos puntos de crecimiento

Módulo 3. Por último aparece el módulo que contiene la pantalla que convierte al espacio en interactivo, con información a tiempo real.

La combinación e independencia de los diferentes módulos es fundamental para poder acoplar cada Ágora al espacio urbano que la va a albergar.

La cubierta tiene diversas funciones:

- Dar sombra
- Mejorar la lectura de la pantalla
- Adquirir energía solar

A través de la misma, aparecen diferentes puntos de luz capaces y la energía necesaria de la pantalla. Así, los diferentes eventos, podrán contar con equipos eléctricos para que se desarrollen con normalidad.

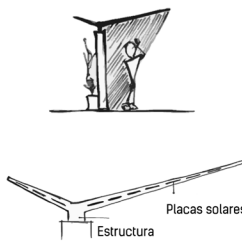


Figure 5. Conecta-T Five areas for events. Source: Francesc Vaquer.

constant transformation. It can be observed how, year after year, it adapts to the new demands of the city and its users. Teachers and students have been witnesses and actors of the changes that have taken place in the appreciation and use of this natural environment after the pandemic. It has not only become a space for health and well-being in the open air, but also for citizen entrepreneurship. The dynamics of new uses and their social interest deserve attention from the design project: diverse and multicultural learning groups, sporting practices of all kinds, private and public celebrations that take place in the different areas of the park.

Employing design thinking methods in field studies, surveys at this site and, multiple briefings and proposals from the students, we have got a fresh perspective of the needs and possibilities of experiencing open design with different groups of people at this context. As results from the SmarTuria HUB project, a large theoretical and graphic document collection (Figure 3, 4 & 5) has been generated, which has been presented in different international forums, conferences design journals (EADesign, Cisti, Achi etc.) and have been shown in different exhibitions. The multiple partial studies developed in the different sections of the Turia Garden, constitute a solid foundation on which new design projects and installations for this environment are developed, meeting the identified needs: insufficient signage, wc and toilet services, lighting, connectivity, meeting etc.

The SmarTuriaHub Project challenges the students to locally engage as active citizens in our context, developing empathy and analytic capacities not only focused in the spatial features of this site, but in its potential role as a sustainable social frame for collective imagination and research at the city. With this intention in mind, we experiment with immersive learning in this urban context, where the studio and the projects are transformed into a kind of laboratory of social innovation that adds value to the environment through design. For this reason, we will continue to establish collaborations at a local level in successive years, as the experience has shown that working with real projects has an impact on the intrinsic motivation of students, increasing their level of commitment to improving the world in which we live.

To conclude, these learning experiences outdoors produce a sense of belonging and awareness which have disruptive effects and might reach sustainable design innovations.

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