



3 - LIVING DESIGN TRAINERS' WORKSHOP, IAAC



3.1 Introduction

The Trainer Workshops are a 3 days intensive programme to train experts that will be teachers in the student's programs and get them familiar with concepts belonging to other disciplines. This trainer's workshop will support a Semester Student programme, on biotechnology, design for urban resilience and business through inter/transdisciplinary approaches.

The second Trainer Workshop, Living Design Trainers' Workshop, took place on the 03rd, 04th and 05th of April 2019 in Barcelona, Spain. Living Design Trainers' Workshop aimed at providing partners coming from the field of biology and business with the basic learning about Intelligent Design concepts and courses setup, in order to allow them to face the transdisciplinary Students' Programs.





















3.2 Workshop Structure

Living Design Trainers' Workshop was a three - day event. HEIs ensured the participation of 2 staff people, from each of their teaching and training team delivering the programme and 1 staff representative from each SMEs. They shared knowledge, concepts, and methods in order to overcome the disciplinary barriers and to discuss the innovative modules and test them internally in peer learning sessions.

Detailed workshop programme:

Day 1 - Knowledge sharing on Intelligent Design and Educational courses

Understanding Intelligent Design

09:30 Meeting at IAAC - welcome coffee

10:00-10:45 - Lesson 1: Introduction to Intelligent design

11:00-11:45 - Lesson 2: Methodologies and Tools

12:00-12:45 - Lesson 3: Intelligent Design Products / 10 Case Studies

12:45-13:30 - Lesson 4: Intelligent Design Companies / Plant-e products Case Study

Intelligent Design Education

15:00-15:45 - Lesson 5 - part 1: IAAC Educational Programmes

16:00-16:45 - Lesson 5 - part 2: IAAC Courses Structure

17:00-17:45 - Lesson 6: Case Study: Biophotovoltaic elements development course

Day 2 - Case studies in Barcelona

<u>Applications of Intelligent Design</u>

09:00-10:30 Case Study 1: Visit Mediatec

11:30-13:30 Case Study 2: Sagrada Familia

14:00-15:00 Lunch break

Facility for education on sustainability: IAAC Valldaura Campus

15:30-17:00 Case Study 4: Valldaura Campus

Day 3 - Workshops

Innovative educational programs development

09:00 - Meeting at IAAC - welcome coffee

09:00-11:00 Workshop 1: Yearly transdisciplinary programmes development - LIVING **DESIGN Semester**

11:30-13:30 Workshop 2: Intensive transdisciplinary programmes development -LIVING DESIGN Intensive Course

3.3 Objective

The aim of evaluation is contributing to improve educational activities -while they are happening, as well as to provide insights to design better educational activities.





















The evaluation of all educational activities will include analysis of:

- the effectiveness of the workshops/learning programme including its reach of the target audience
- the impact of the programme on students understanding about Biotech methods
- the skills, competencies and dispositions gained during the programmes
- the application of the knowledge and skills gained
- the strengths and weaknesses of the education approach used
- recommendations for changes to the programme so the programme may be implemented in new courses.

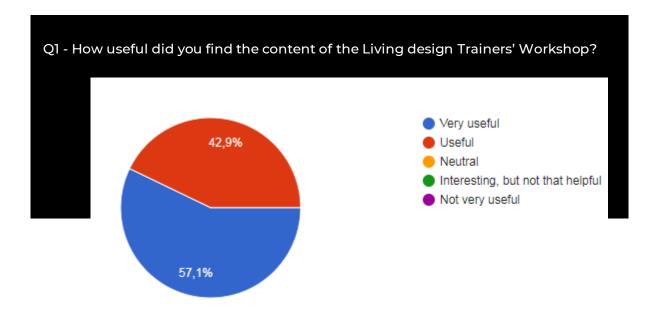
In this document we present a summary of the evaluation results that we have done to support the improvement of the programme.

3.4 Methodology

We carried out an evaluation survey which included a mix of qualitative and quantitative feedback to evaluate the success and impact of the event.

3.4.1 Survey Results

5 partners answered the survey.



All of the partners responded positively about the content of the Living design Trainers' Workshop.











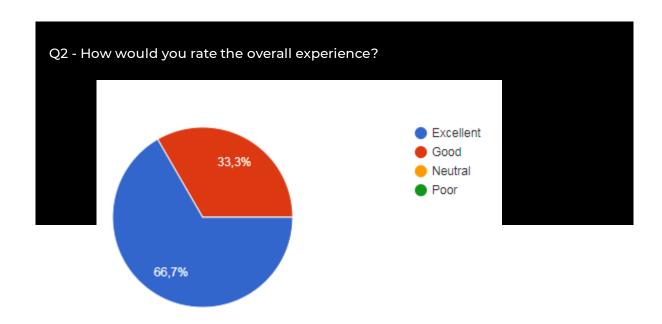












All of the partners responded positively about the overall experience.

Q3 – What aspects of the Living design Trainers' Workshop did you enjoy the most?

We received seven positive, distinct responses to this question:

- I really enjoyed the field trip, and the time devoted to plan the one year programme.
- The active sharing of knowledge between partners and also the team building part that could be a fundamental aspect for the success of the project itself.
- Multidisciplinary discussion and innovative learning project.
- Working with multidisciplinary profiles.
- I had the opportunity to exchange ideas with BUILDs partners.
- Giving the workshop and having everybody getting some hands-on experience with new technology. Also the inspirational excursion to Valldaura.
- Very efficient general organisation; very clear presentations; multidisciplinary interactions; presentation of a wide range of case studies; excursion in the field; presentation of the educational programmes at IAAC.





















Q4 – What did you learn during the Living design Trainers' Workshop that you anticipate using in the transdisciplinary students' programmes?

All partners shared their comments regarding the new things that they've learned in this Trainers' Workshop:

- I learnt that nature has always been an inspiration for architects, for example all Gaudi's work is inspired in the form of nature, and currently there are many innovations in architecture that is inspired in the nature's behaviour - so they are designing responsive buildings that can even breath, filter or de-pollute air and water.
- Multidisciplinary collaborative approaches.
- Great work environment for lectures preparation.
- As an architect I learned how working with different profiles is different way of thinking to achieve a certain project which is interesting to show the students and teach them how they can collaborate with other profiles achieving a certain goal in there project.
- I'm part of the team that has organised the Living design workshop, the lecture of City Facilitators was really useful to set up the transdisciplinary program as strategies for team building have been presented.
- Stressing designing from technology or environmental perspective, and not vice versa.
- Definitions of architecture and urbanism; how architecture and urbanism try to give answers to environmental challenges in cities.

Q5 – Was there anything you did not understand during the Living design Trainers' Workshop? Please provide specific examples.

Most of the partners understood everything during the workshop. Only some partners still had a doubt about parametric design and computer design.

The comments expressed were:

- What is parametric design
- No.
- Everything was clear.



















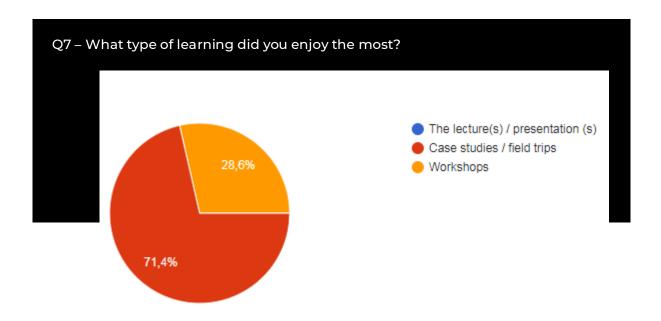


- The computer designing went a bit over my head, but that's because I'm really not educated about that matter.
- In my opinion almost everything was clear.

Q6 – What questions do you still have about the intelligent design and educational courses?

Most partners have reported some questions:

- No questions for the moment.
- I have clarified almost all my doubts, I still have few practical points of the next events not totally clarified, but these ones will be solved, of course, during the organisation of the same.
- No questions.
- Since we entered a digital world how the future of education will be with multidisciplinary profiles.
- None.
- Go more into detail into the definitions of architecture and urbanism; find the way
 to develop links with the intelligent design and the field of BioTech and more
 globally ecology and biology



All partners enjoyed the most case studies/field trips as type of learning.





















Q8 – What other specific comments do you have?

These are the specific comments reported by partners:

- Huge compliments to Chiara!
- We have to write a glossary with the main definitions of the concepts, tools, ... we
 use in each of our disciplines/approaches. The workshops are really very useful to
 better know each other and to progress. I am very enthusiastic and confident
 about the progress in our interactions!

3.4.2 Feedback from Living Design Trainers' Workshop

At the end of the Living Design Trainers' Workshop, some of the participants highlighted the following:

Areti Markopoulou – IAAC: "My impression is that the workshop has been very positive and fruitful for all partners. Trying to understand each one from their point of view, and background, how we can put together our complementary skills in order to create something new, this is the most exciting part. I also feel that all three days has been a great opportunity for everybody to learn from the rest and also reflect on how we are thinking the idea of intelligent design in our discipline. I'm really looking forward to our next steps or our common activities and our next meeting in Vienna."

Luise Noring - City Facilitator: "I'm very grateful to IAAC and all the other BUILD partners for these three last days that have been extremely productive. I think it's been an important team-building exercise and I think that we all came with different expectations and we're seeing things from our own disciplinary background and so it's been exciting to try to create the interfaces and establish some kind of common language and also align expectations, to the largest extent I think we have succeeded in this."

Christophe Schwartz – UL: "It was very nice to be here in Barcelona to share ideas with all the colleagues from different disciplines. I was very impressed by the campus and I think it's a very nice place to work and to be creative and to have some new ideas. Now the idea of the project for an architect point of view is more comprehensive for me and that's very important."

Martin Petersen - Green Tech Challenge: "I particularly like the fact that we saw the immersive learning experience that IAAC has started as a master this year





















and of course connecting with all the bright brains and seeing how they wanted to help students build more intelligent and living cities. It has been a great experience."

Geoffroy Sere - UL: "I really enjoyed this workshop especially because I discovered how the IAAC architecture students could be very inspiring."

Tim Crolla & Nanda Heshof - Plant-e: "In this workshop we did a practical approach. We did a Plant-e Sprout 'n Spark! So everybody learn how to create electricity from plants."

Ramez Saad - Econick: "We come here to IAAC with different cultures, different knowledge backgrounds. This workshop has been very rich, providing very innovative and creative ideas that will help to set up BUILD project."

Laura Ohler - City Facilitators: "It was very interesting to get to know more about the work of IAAC, so we went through the lab and to see all the materials they're using and the 3d printers and other virtual reality tools. We also saw handson work, students were in the laboratory working. We also went to Valldaura where students are living for one year creating solutions it's really incredible."

Aishwarya Krishnan – WU: "It has been an absolutely amazing time to see of how an institution can develop and be holistic and see a very innovative way of learning and teaching and how that actually embeds itself into the city. It is a very successful approach. I'm grateful to have been here, and being able to see it."

Marite Guevara - Ersilia Foundation: "I learnt that nature has always been a source of inspiration for architects. For example, we saw how Gaudi was inspired by nature when he designed La Sagrada Familia. And currently architects still inspired by nature, not only by its form and beauty but also by the way nature reacts, behaves, and performs. For example creating facades that capture CO2 or that respond to human presence."

3.5 Conclusion

A common underlying expectation of this workshop organizers was to provide partners coming from the field of biology and business with the basic learning about Intelligent Design concepts and courses set-up, in order to allow them to face the transdisciplinary Students' Programs.

This was achieved, and key to the workshop success was the numerous lessons learned including:

 The nature has always been an inspiration for architects, for example all Gaudi's work is inspired in the form of nature, and currently there are many innovations in architecture that is inspired in the nature's behaviour - so they are designing responsive buildings that can even breath, filter or de-pollute air and water.





















- Multidisciplinary collaborative approaches.
- How working with different profiles is different way of thinking to achieve a certain project which is interesting to show the students and teach them how they can collaborate with other profiles achieving a certain goal in their project.
- Stressing designing from technology or environmental perspective, and not vice versa.
- Definitions of architecture and urbanism; how architecture and urbanism try to give answers to environmental challenges in cities.

All partners were very satisfied with the second Trainers' Workshop. Since trainers have to get familiar with concepts belonging to other disciplines, there were still some questions and doubts that needed to be further explained at the end of the workshop















