LEARNING THROUGH ENTREPRENEURSHIP

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A CREATIVE APPROACH

ATLANTIC YOUTH CREATIVE HUBS

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Endorsements

"When someone undertakes the reading of a manuscript that deals with the results of a European project, they might think in advance that they face an arduous and perhaps tedious challenge, as the author tries to summarise the work and effort of years of individuals and institutions. However, *Learning Through Entrepreneurship: A Creative Approach* intrigues and encourages participation in its content.

Innovation, solutions, creativity, talent, experimentation, learning and non-formal learning, idea, business, entrepreneur, incubation, reveal accessibility, reality, flexibility, diversity, the inclusion of a project where young people can forge a future without obstacles, without limitations, making their concerns, their dreams, their wishes come true in a more sustainable world, because it will be their world, a world formed, informed and created by themselves.

Transforming the business reality of Europe with innovative systems and lines, making room for validations and key solutions in innovation, such as ideas for a business, involves cooperating to be able to reduce problems, these underpin the AYCH project.

Expressing the importance of seeking the true meaning of business life and promoting staff by valuing their own abilities in favour of others is exemplary in a society that values and appreciates respectful and sustainable initiatives that, in addition to adding value to the end customer, they do it from an ethical and responsible prism.

Learning by creating in AYCH supports the motivation of young people who can be leaders of change, offering a space in which to share their experiences and develop their projects. AYCH are the people.

I would like to highlight as a summary 'Our ultimate aim has been to help shape young people's professional futures in the way they wish or dream of, so they can assume responsibility and feel capable of succeeding and shaping the future' (p. 154) , an objective that encompasses the spirit of the project and that defines my thinking in my professional life."

Mª DEL PILAR DEL ORO SÁEZ
COORDINADORA, EUROXUVENTUDE, FUNDACIÓN GALICIA EUROPA

"Atlantic Youth Creative Hubs and projects like it across Europe and internationally are crucial. Crucial, now more than ever, as we design and reimagine the world we live in and as we build more resilient, sustainable, adaptive societal and environmental systems that are able to interface and withstand the complex, ever-changing, multi-faceted, interdependent challenges we have wittingly and unwittingly created for ourselves, as a human race.

In many ways we have failed our young people (and arguably the rest of society), in our pursuit of relentless growth and an over-dependency on carbon-intensive, extractive and reductive models and collectively we need to stop, reflect and converge on projects, movements and communities that embrace new modalities of thought, approach and ultimately more equitable, compassionate and regenerative practice.

The AYCH project provides hope, as well as practical and tangible skills and the means to close the gap on bringing the future closer to us, as Europeans. We need leaders and leadership, across the fullest and broadest spectrum of society and to facilitate the uptake of design-led, distributed and innovative social enterprise that creates social and environmental value as the AYCH project has been doing, over the last four years, giving us a strong platform to continue this work and reach out to many others.

It has been a great pleasure and source of immense pride to have been involved in this project, from the outset and to see the impact it has had on the lives of young people across the Atlantic Area. This is just the start and there is much hard work and energy required to genuinely create the impact and change we, as a project team, seek and have sought from the beginning.

I'd like to take this opportunity to thank and congratulate all those that have brought this great project to life: Thank you, Merci, Gracias, Grazas, Obrigado."

OLI RAUD
CO-FOUNDER AND ARCHITECT OF THE AYCH PROJECT

"Guaranteed to ignite energy in anyone who is curious about utilising methods that help to bring their sustainable ideas for the future to life using a collaborative approach, alternative design and learning methods as well as key enabling technologies, the AYCH Book is full of information as to how businesses, communities, social enterprises and individuals can develop their forward-thinking ideas.

Detailed explanations of tried and tested workshops, Design Thinking methods and an alternative approach to teaching demonstrates the positive impact and long-lasting momentum AYCH has created amongst young people living in the Atlantic Arc, which includes groups in the UK, France, Portugal and Spain of participants who are on their way to creating the businesses of the future.

As a UK based AYCH Ambassador, a previous participant in a Transnational Creative Jam and someone who was lucky enough to experience a 5-day Creative Residency with the Portugese AYCH partners, I could not be more proud to read the compilation of success stories to come from the project and how it has reached a wide variety of individuals hailing from various countries with different backgrounds, skill levels and experiences. AYCH is showing us the way of how alternative education can reach those that traditional methods may bypass, resulting in improved confidence, a stronger belief in the difference an individual can make and the wonderful friendships and partnerships that are made in the process. At such a crucial time in humanity that has shown us that the usual process of living, learning and creating can no longer be maintained and is not always successful, AYCH has created the foundation for a strong international community of forward-thinking innovators and change makers who are passionate about creating a better future."

LOUISE HONEY
CREATIVE CONSULTANT FOR SUSTAINABLE FASHION AND TEXTILE DESIGN, AYCH YOUNG AMBASSADOR

"Les petits débrouillards Grand Ouest, with the UBO Open Factory, run in Brest, Super Brest : the Brest Science Hack Day; a hackathon that seeks, with science, to improve the city. It was on this occasion that we had the opportunity to welcome, thanks to AYCH, young Europeans who came to form project teams to invent the city of tomorrow.

The challenges (climate, biodiversity, solidarity, etc.) facing humanity are such that urgent action is needed. It is vital to get together in order to be creative, to be able to invent other ways of doing things and especially to implement them to change our ways and build a better world. For this it is necessary to be able to collaborate with others, to be creative, cultured, daring, courageous and tenacious.

Finally, what if AYCH was a way of bringing in the methods and values of solidarity, popular education, critical thinking, non-profitability, development as the basis of the business of tomorrow?"

ANTONY LE GOÏC-AUFFRET
ATTACHÉ DE DIRECTION CHARGÉ DU NUMÉRIQUE ET DE L'INNOVATION, LES PETITS DÉBROUILLARDS GRAND OUEST

"The book provides extensive details about the Creative Jam methodology, structured key ingredients and steps defined are very useful to learn about Entrepreneurship. Especially when you have already experimented and adapted methodology, that proves its authenticity. The acquisition of multidisciplinary and key enabling technologies, and collaboration of diversified and multi-talented youth across the Atlantic Ocean, are some of the aspects of the AYCH project which greatly inspired me. This initiative has produced a lot of fantastic ideas, unveiled a lot of talent, cultivating a skilled force, and will define the future shape of the world. I had a versatile experience in Transnational Creative Jam 2019 which was held in Gijón, Spain. I received a chance to join this programme as a young participant and also as a mentor at the same time where I delivered a Workshop related to Visual Programming. Later, I became an Ambassador of AYCH from Spain. Participants from diverse backgrounds and with vibrant mindsets, gathered at the one platform where we all exchanged unique and innovative ideas to combat particular issues of the today world, for a better and bright future."

KOMAL KHAN
AYCH YOUNG AMBASSADOR

"As a project, AYCH comes in at a crucial moment of social and environmental transition in the world. It works towards empowering the stakeholders of this transition, the youth, to understand, deal with and become drivers of change for the future. The AYCH publication documents the lived experiences of the young people and the various organisations involved with the project. Amazingly, all the testimonies point to the value of collaboration, hands-on learning and reflective practices. It is these lived experiences that make the project relatable to all those who haven't had the opportunity to be a part of it.

The book also highlights the process followed by the project right from its inception to its possible future. What stands out in this process is the project's continuous evolution and the ability of the participants to assimilate it while disseminating the learning at each step. Having been involved with AYCH, I can testify that the project really shows the power of a creative, collaborative and experience-based process to harness the innovative potential of the youth to address very real and relevant issues."

ADITYA JOSHI
DESIGNER, AYCH YOUNG AMBASSADOR

"Learning is key. I believe people must keep on learning and investigating no matter what they do for a living. Professionals need innovation as quickly as possible as the world keeps on changing, for the best and, unfortunately, for the worst as well. In 2021, teenagers and young adults are always connected to the latest trends, technologies and environmental, social and political discussions, moreover, they're getting more and more used to create content, design their own things and turn into entrepreneurs, but this last one can be harder to achieve. That's where I find that is the perfect gap for young creative people in the industry.

Creativity is not a gift, it needs to be exercised in our minds, we need to try and fail, retry and learn from it. This book brings guidance to young people in the process of dealing with Design Thinking and entrepreneurship. It does the best on picturing what the AYCH project is, from the casual environment to the hardworking marathons, from the innovative design strategies to the sense of community. I believe that AYCH presents an amazing learning environment and strategy to connect young people in the Atlantic region, creating opportunities, teaching, promoting an exchange between cultures and building virtual bridges. This publication is very rich and powerful and that's why I'm so happy to endorse it.

I'm a Brazilian architect / computational designer living in Porto, Portugal. My connection with AYCH happened when I was taking part in a design incubation at Porto Design Factory, I had the opportunity to attend AYCH Gijón Transnational Creative Jam 2019, it was a very enriching experience. Currently, I'm an AYCH ambassador representing Santo Tirso and I'm very grateful for the trust in me as an individual and as a professional."

VICTOR ALONSO DA SILVA
ARCHITECT & COMPUTATIONAL DESIGNER, AYCH YOUNG AMBASSADOR

"The rapidly changeable world that we are experiencing is exposed to unexpected threats. It has turned upside-down the different models we consider normal. It is crucial to prepare the next generation of young people for even major challenges by breaking paradigms and enhancing and promoting the transversal skills that are presented in this book and which were the main focus of the AYCH project: creativity, critical thinking, problem-solving, management and entrepreneurial skills and digital competencies.

Nowadays, it is not about gathering knowledge, the key is how to find and make the best use of this knowledge. As it is pointed out in the book, tools that promote collaboration, «out of the box» thinking and participation in decision-making strategies seem to have a big impact on youth population.

The future will be in their hands and we need open-minded and adaptable people able to identify problems and solve them with creativity in an empathy with society and the environment.

I would encourage you to have a look at this publication where you will find proven examples to pursue this."

LAURA GONZÁLEZ MÉNDEZ
TECHNICIAN, INTERNATIONAL AFFAIRS
AND CITY BRANDING, GIJÓN CITY COUNCIL

Glossary

Atlantic Arc. Geopolitical area described by the European Commission. It includes Ireland, the United Kingdom, France, Spain and Portugal.

Blue-sky thinking. Creative ideas that are not limited by current beliefs or practical constraints.

Cornerstones. Fundamental ingredients of the AYCH project that take the form of long-term or short-term activities run by the AYCH partners with young participants.

Creative Jam. A 2 to 3-day intensive experiential, creative event where young participants go through a 3-phase process: Discover, Learn & Explore and Solve & Create. A Creative Jam can be organised locally by an AYCH partner or it can gather participants from all AYCH partners in which case it is called a Transnational Creative Jam.

Entrepreneurship. The process of acting upon opportunities and ideas and transforming them into value for others.[1]

Experiential Learning. The process of learning through experience. The sense-making process of active engagement between the person and their environment.[2]

Fab Lab. A fabrication laboratory offering to the general public a diversity of fabrication and digital fabrication tools. Fab Labs are chartered by the Massachusetts Institute of Technology and The Fab Foundation.

Hackathon. The final part of a Creative Jam where young participants get together to rapidly bring their ideas to life through quick and dirty prototyping and by using Key Enabling Technologies.

Idea Incubation. The process of bringing ideas into reality.

Iterative Approach. Opposite to a step by step linear process where the outcome is known and fixed, it implies trying and repeating in order to reflect upon and adapt the methods, tools and results of the process.

Key Enabling Technologies. Technologies that enable process, goods and service innovation.[3] Within AYCH examples of these technologies are: additive manufacturing (3D printing); subtractive manufacturing (milling, laser cutting, vinyl cutting); coding and programming; immersive technologies (Virtual Reality and Augmented Reality).

Learning through Making. The process of learning while making. Making implies constructing an idea into some physical or digital form.

Prototyping. The process of bringing ideas to life by making them visible and understandable to others. A variety of techniques can be used to prototype an idea: from low-tech sketching to high-tech 3D printing.

Quick & Dirty Prototyping. Bringing ideas to life in a fast way and by using the materials and resources at hand.

Serious Game. A game with a purpose other than entertainment.[4] Although serious games are mainly video games, in the context of AYCH it refers to physical or online games developed by the AYCH partners in order to engage young participants in a creative thinking process about societal and environmental issues.

Social Entrepreneurship. Creating sustainable solutions to address societal, cultural and environmental challenges.

Transformative Learning. The process of deep, constructive, and meaningful learning that goes beyond simple knowledge acquisition and supports critical ways of thinking.[5]

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[3] *Kristina Dervojeda, Anton Koonstra, Mark Lengton, Diederik Verzijl, and Elco Rouwmaat, Boosting the potential of Key Enabling Technologies Addressing Skills Needs in Europe (European Commission, 2016).*

[4] *Tim Marsh, "Serious games continuum: Between games for purpose and experiential environments for purpose," Entertainment Computing 2, no. 2 (2011): 61-68.*

[5] *Ali Simsek, "Transformational Learning," in Encyclopedia of the Sciences of Learning, ed. Seel N.M. (Boston: Springer, 2012). https://doi.org/10.1007/978-1-4419-1428-6_373*

INTRODUCTION

We have an education system across Europe that isn't fit for purpose; it is formal and prescriptive and not appropriate or suitable for today's digital and connected world.[6] Our sincere aim in the Atlantic Youth Creative Hubs (AYCH) project is to do more than fill the gap in what is missing in mandatory education. AYCH allows us to break free from this restrictive education model and give opportunities to young people that haven't previously had the circumstances to explore their true interests or discover those that are unknown to them. Young people often find themselves tethered into a way of learning which belongs to a previous age. AYCH aims to change that.

The global challenges that we face will have the greatest impact on our young people and the generations that follow: the climate emergency, growing inequalities, access to clean water, population growth, habitat and species loss, etc. We should listen to, encourage, enable and equip young people to find short and long-term solutions to the volatile, uncertain, complex and ambiguous world in which we live and the global challenges that we cannot ignore. And at the same time enable young people to live independent, fulfilling lives.

AYCH does this by working with young people to design more expansive learning opportunities where interdisciplinary and collaborative approaches are not extraordinary, where Key Enabling Technologies are used alongside pen and paper, where geopolitical boundaries are unimportant and where solution finding is shared. This approach is essential as the remit of mandatory education narrows and because opportunity is often rationed according to affluence. AYCH gives opportunities to all participating young people, regardless of their background or previous experiences. Opportunities to discover or explore their true interests and sometimes to re-invent themselves. We do this by:

- Learning from previous projects but not being limited by them
- Practising what we preach by being innovative, prototyping, maximising our joint resources, and collaborating
- Learning by doing and exposing young people to Key Enabling Technologies
- Creating a critical mass of entrepreneurially minded individuals
- Promoting life in a world where transnational interaction and mutual respect is the norm
- Creating lasting networks and celebrating our capacity to innovate together

The INTERREG AYCH transnational project targets audiences of all backgrounds and levels of study from 16 to 30 years old, and it involves multiple partners from France, Spain, Portugal and the United Kingdom:

[6] *Peter Hyman, "Our school systems are broken. Let's grab this chance to remake them," The Guardian, July 5, 2020.*

Delivery Partners: Most AYCH partners engage with young people to deliver a range of activities using their own or carefully identified local expertise and resources from business, associations, academia and Non Governmental Organisations (NGOs).

Hubs: Are local spaces or centres where young people can go to for activities, support and use equipment without payment. Most delivery partners have one hub, but Space (UK) has 3 hubs in Devon (UK).

Associate Partners: Are organisations who are not AYCH Delivery Partners but who, in one way or another, support the project.

Our collaborative approach extends beyond our partnership. We invest in our communication, capitalisation and consolidation so that the "AYCH way" is freely available to other organisations, services and countries. The main components of this capitalisation strategy are: the Wiki, an online collaborative open-source platform where we share the AYCH expertise, the hubs support desks and an Evidence Library where we share the outcomes and long-term impacts of the project for the participants and partners.

ABOUT THIS BOOK

This book delves into AYCH's vision and work from an experienced-based perspective following almost 4 years of collaborative and intensive activity. As we write this book, AYCH continues its work locally, regionally and transnationally. We will present some programmes and activities that are still on-going. The book intends to share the underlying values of AYCH and how we implement them in practice. In the process, we will refer to inspiring academic and practical approaches. However, the book mainly builds up around the experiences of the young participants, the partners and other contributors to the project. You will encounter different writing styles, which we have chosen to embrace, especially as individual contributions are often not written in their native language. It exemplifies the diversity of the project.

The book is divided into 7 chapters. Chapter 2 explains the main activities and programmes developed within AYCH at a local and transnational level.

Chapter 3 reaches into our vision of entrepreneurship and our experiential, creative approach to learning, practising and experiencing entrepreneurial skills in a complex and ever-changing world. In this chapter, we share how having fun, embracing diversity and being empathic are levers for creativity and entrepreneurship.

Chapter 4 discusses how within AYCH we created innovative, open, collaborative and non-judgmental learning environments. This chapter delves into the power and importance of the AYCH Key Enabling Technologies for the participants to bring their ideas to life. In doing so, it analyses how we kept creating these learning environments with the emerging challenges associated with the Coronavirus pandemic.

Chapter 5 explores the fundamental multicultural and transnational dimension of AYCH, which is key for unlocking the young participants' and partners' creativity. It also examines how "quick and dirty" prototyping was a successful approach when working with multicultural groups.

In conclusion, Chapter 6 opens up to the new opportunities and projects created through AYCH for participants, partners, specialists and institutions at a local, regional and EU level.

HOW TO USE THIS BOOK

Although the book has been conceived so its readers can understand the AYCH approaches and potentially transfer them to other contexts, this book is not a manual. This book is a compendium of experiences designed to both intrigue and inform. It is intended for a diverse readership, for those practitioners or policy makers interested in promoting an entrepreneurial mindset in any generation, or for educationalists interested in experiential learning in informal environments, or for those who are intrigued by the use of Key Enabling Technologies by interdisciplinary teams and for those who believe in the promise of young people. It does not develop in an exhaustive way all the tools (creative, technical or managerial) developed or used during AYCH. If you would like have access to specific tools, tools guidelines and tools templates, an online AYCH toolkit can be found at **http://wiki-aych.lecolededesign.com**

The book follows a colour code to make its reading easier. Young people's personal experiences and the activities carried out by the partners are in the yellow sections. If you are interested in the theoretical and practical approaches that inspired the AYCH project, follow the blue sections.

You can start to read it at the beginning and use the colour coded signposting as you progress. If you prefer a more interactive approach we suggest you visit the online version where you can move easily between connected content at **https://www.aych.eu**.

Who we are

United Kingdom

PACIFICSTREAM
A community interest company that provides high-quality creative consultancy services to help 'creative' entrepreneurs at any stage of their journey.
Hub: **Platform and Basecamp Liverpool**

DEVON COUNTY COUNCIL
The council administers the rural county of Devon through elected members who represent the 800,000 residents.

SPACE
SPACE are a youth charity who provide a wide range of services to unlock potential with young people and their communities.
Hubs: **Bideford, Exmouth & Tiverton**

PLYMOUTH COLLEGE OF ART
An independent, university-sector art school run by artists and designers for artists and designers.
Hub: PCA **Horizon Hub**

PLYMOUTH CITY COUNCIL
The unitary authority for Plymouth (Devon) and as such is a self-administering region run by elected representatives of the population.
Hub: **Plymouth City Council Youth Service**

Portugal

CÂMARA MUNICIPAL DE SANTO TIRSO
Local public entity that integrates the State's administrative organization, with about 70 thousand inhabitants. INVEST Santo Tirso, is responsible for support entrepreneurship and small business, attraction of investment (national and international) and support for the expansion and internationalization of the companies. Hub: **Fábrica de Santo Thyrso**

LIV

PLYMOUTH

BREST

M

GIJÓN

AN

LUGO

SANTO TIRSO

France

BREST
BREST MÉTROPOLE
Public institution gathering 8 cities including Brest with more than 200 000 inhabitants. Supported by the service of Employment and Inclusion. AYCH is focusing on inclusion in Brest.
Hub: **UBO Open Factory**

RENNES
ATLANTIC CITIES
Gathering 7 million inhabitants, the Atlantic Cities Association (ACA) is the only network for local authorities in the Atlantic Arc and a renowned expert before the EU institutions.

NANTES
L'ÉCOLE DE DESIGN NANTES ATLANTIQUE
A higher education postgrad design school with 1500 students from across the globe.
Hub: **City Design Lab**

ANGOULÊME
GRAND ANGOULÊME
Public Establishment of 38 municipalities with approximately 141,000 inhabitants. Located in the Charente department of the region Nouvelle Aquitaine, its central city, labeled as a UNESCO creative city, is Angoulême.

Spain

GIJÓN
AYUNTAMIENTO DE GIJÓN
Local public administration is managing the public affairs of Gijon, City located in the Spanish Atlantic area. The City has more than 273.000 inhabitants. The city is characterized by its dynamism in different spheres: economic development; culture; social participation; European affairs...

LUGO
VIDA LÁCTEA
Company specialised in youth, entrepreneurship and social development that has incubation spaces, youth consulting and local development.
Hub: **Lug Open Factory**

The way
we work

Partners working at different Steering Committee meetings in several locations and online, 2017-2020.
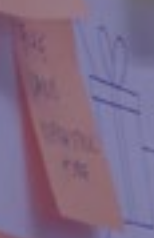
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THE AYCH CORNERSTONES

PREVIOUS PAGE
Design Thinking activity during the Gijón Transnational Creative Jam. Gijón (Spain). April 2019.

In order to offer young participants the possibility of having a collaborative, transdisciplinary, transnational and experiential learning process, the AYCH project has put in place 6 cornerstone approaches:

1. Transnational Creative Jams: these are intensive 3-day long annual events that bring together all the AYCH project partners as well as young people from across the Atlantic area and beyond. The events follow the AYCH creative approach: Discover, Learn & Explore and Solve & Create, through a series of hands-on activities and workshops where the young participants experience and practise creative, enterprise and Key Enabling Technologies skills. An essential activity in the Transnational Creative Jams is the Hackathon, the final challenge where young participants, in transnational teams, bring their ideas to life through quick and dirty prototyping and pitch them in front of their peers, specialists and a jury.

2. Local Creative Jams: the local version of the Transnational Creative Jam. Usually, a 2 to 3-day intensive hands-on, creative event organised by an AYCH partner or hub. It brings together local participants to experience the AYCH creative approach: Discover, Learn & Explore and Solve & Create. The organiser partner adapts the methodology to the specific needs and resources of their hub. Some specialists and young people from other hubs can participate in mentoring activities.

3a. Idea Incubation Programme: is a programme that allows the participant to transform their ideas into reality and start or develop their creative business. The participants go through an intensive series of workshops and experiences, followed by on-going follow-up support. AYCH Hubs customise the Idea Incubation Programme for their own organisation and the young people with whom they work.

3b. Online Idea Incubation: evolved from the Idea Incubation Programme as a response to the restrictions imposed during the Coronavirus pandemic. The evolution of the Idea Incubation Programme highlights the adaptability of AYCH partners as well as matching with the fundamental values of the project: being able to adapt in a changing world. Online versions of workshops, meet-ups and mentoring are highly successful and transferable.

4. Residencies & International Residencies: these are 5 days of immersive experiences where the participants develop their idea from the incubation in another hub with other young participants, possibly in another language and in another culture. Whether the experience is transnational or not, the participant accesses different equipment, expertise, and experiences local traditional skills. For example, Santo-Tirso is a popular residency because of their textile history, Angoulême attracts young people as a world-leading centre for animation and the Plymouth College of Art for their

Art/ Glass/ Craft/ Fashion/ Fab Lab facilities and expertise. Residencies match the young person and their desire to develop an idea or activity with a hub initially for one week, but longer-term relationships develop from them.

5. Internships: were initially meant to be paid or unpaid work experiences or placements in private or public institutions where the young person would work for two weeks as a mutually beneficial experience for the host and the intern. We have found that a less prescriptive model in terms of placement duration is a better "fit" for young people and businesses and therefore replaced our 200 x 10 days placements with a target of 400 weeks of placement equivalent. The Coronavirus pandemic and the resulting economic uncertainty and restrictions made internships more difficult to implement. So, we investigated remote or online internships, and in a few cases, these were successful.

6. Ambassadors programme: the AYCH Club brings together a group of ambassadors who are young people that have first-hand experience in a variety of different AYCH activities and events over an extended period. Ambassadors are now embedded in and help to co-design AYCH. They form a strong network and will be central to AYCH's legacy.

AYCH OFF-SHOOTS:
LOCAL PARTNERS' INITIATIVES

In addition to these 6 cornerstone approaches, local partners have put in place a series of programmes and activities around social entrepreneurship in partnership with local stakeholders:

Training the Trainers: an online live training session organised by the AYCH partner Plymouth College of Art (UK) and delivered by Plymouth College of Art, Space (UK) and Vida Láctea (Spain). It shares best practices, methods and tools with practitioners from other institutions and projects working in the field of social entrepreneurship.

AYCH Ocean: developed by Vida Láctea in Spain, draws attention to the 2030 Agenda for Sustainable Development and the future of society by fighting for the eradication of single-use plastic and improved environmental awareness. The project puts in place a particular methodology to collect, measure, classify and evaluate the local impact of sea litter in a particular area. After this, participants engage in a creative process to prototype solutions on-site. AYCH Ocean has spread to other regions and institutions within and outside AYCH.

AYCH Kids: created by Atlantic Cities in France, is a creative contest open to all kids and young people from the Atlantic Arc. AYCH Kids encourages future generations to think on environmental issues such as marine litter or how cities could become greener through creative work **https://www.aych.eu/aych-kids**

AYCH Talent: a group of ambassadors who are using the ambassadors' programme to enhance their employability skills and opportunities.

DISSEMINATING BEST PRACTICE

Capitalisation, communication and collaboration activities are essential aspects of AYCH. We do this by:

The Wiki: a collaborative platform initially conceived as a Toolkit where AYCH participants, specialists and partners share and describe the creative and technical tools in a useful and practical way. After 4 years of AYCH, the Wiki has become an open-source platform where we share the AYCH vision, expertise, methodology, tools and events with the help of different media, e.g. text, images, videos and podcasts, in an accessible and structured way. The Wiki is aimed at different users: young people developing an idea, people who facilitate idea incubation processes and specialists who have a professional or academic interest in the design-driven creative approach to entrepreneurship. **http://wiki-aych.lecolededesign.com**

Progression Support Desk: each Hub supports or signposts young participants to other services or organisations key for their onward journeys. The hubs can undertake actions in order to build upon and maintain the AYCH legacy.

Evidence Library: an internal tool where we gather and classify the impact outcomes for the young participants and other stakeholders against different outputs and outcomes at local and EU level as well as long term impact. The independent evaluator of AYCH drew on the Evidence Library when evaluating the impacts of AYCH.

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LEARNING ENTREPRENEURSHIP IN THE FACE OF A COMPLEX WORLD

PREVIOUS PAGE
Sarah Packer, Plymouth College of Art. Icebreaker activity during the
Local Creative Jam at The Clay Factory, Plymouth (UK).

A. Social entrepreneurship and transversal skills

Within AYCH, we see entrepreneurship as far more than venture creation or starting a business. Entrepreneurship is linked to an individual's ability to turn ideas into action regardless of the context where this process takes place.[7] The Danish Foundation for Entrepreneurship highlights entrepreneurship as going beyond profit generation by defining entrepreneurship as: "When you act upon opportunities and ideas and transform them into value for others. The value that is created can be financial, cultural, or social".[8]

In AYCH, we are particularly interested in fostering entrepreneurship processes that create social and environmental values, that is, *social entrepreneurship*. Teresa Chahine defines social entrepreneurship as "the process by which effective, innovative, and sustainable solutions are pioneered to meet social and environmental challenges".[9] Social entrepreneurs act upon opportunities that allow them to improve life for many, especially marginalised individuals and groups. Social entrepreneurs create innovative and sustainable solutions that address social issues and profound inequalities: human rights abuses, poverty, illness, unequal access to education as well as environmental destruction and climate change, among others.[10]

Creating social and environmental value in uncertain and unpredictable contexts is at the core of what has been identified as a creation approach to entrepreneurship. Under this approach, entrepreneurs set goals and engage in actions using the resources that are available to them in the perspective of generating an "effect" in their environment and ultimately, the future. Sara D. Sarasvathy named this logic of action *effectuation*.[11] This logic of entrepreneurship action is means-driven; it encourages a divergent way of thinking, experimentation and collaborative work. Furthermore, it recognises failure as an integral part of the entrepreneurial process; instead of avoiding failure it encourages participants to explore different opportunities through experimentation.

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[7] *Alain Fayolle, Paula Kyrö, and Francisco Liñán, Developing, Shaping and Growing Entrepreneurship, European Research in Entrepreneurship series (Edward Elgar Publishing, 2015).*

[8] *Kåre Moberg, Henrik Barslund Fosse, Anders Hoffman, and Martin Junge, Impact of entrepreneurship education in Denmark – 2014. (Odense: The Danish Foundation for Entrepreneurship – Young Enterprise, 2014), 14.*

[9] *Teresa Chahine, Introduction to Social Entrepreneurship (Boca Raton: CRC Press, Taylor & Francis, 2016), 2.*

[10] *David Bornstein and Susan Davis, Social Entrepreneurship: What Everyone Needs to Know (New York:Oxford University Press, 2010), 1-7.*

[11] *Saras D. Sarasvathy, Effectuation Elements of Entrepreneurial Expertise (Cheltenham: Edward Elgar Publishing Limited, 2008).*

Rather than a linear, step-by-step process, we understand entrepreneurship as a dynamic and iterative practice concerned with identifying and creating opportunities, taking calculated risks and using a series of skills to create value in a complex and ever-changing world.[12]

Entrepreneurship is not finite or static given personal quality; it is a process that requires practice.[13] Neck, Neck and Murray identify a group of 5 main skills that are associated with the practice of entrepreneurship:[14]

Play : having fun and engaging in joyful, meaningful experiences frees a participant's imagination and opens their mind to alternative ways of thinking.

Experimentation : acting in order to learn and being confronted with real-world experiences allows participants to learn from each attempt to do something and feel comfortable with trying even if they fail.

Empathy : understanding and appreciating other people's circumstances, thoughts, feelings, perceptions and needs.[15]

Reflection : Actively and consciously making sense of experiences and actions as well as the impact they have on the environment and on oneself.

Creativity : being open to new, different and valuable ways of thinking and doing.[16]

This set of transversal skills are fundamental to the AYCH cornerstone approaches (Transnational Creative Jams, Local Creative Jams, Idea Incubation Programme, Residencies and Internships). More precisely, the AYCH project aimed at fostering the participants' capacity to identify in themselves entrepreneurial skills with AYCH creating appropriate learning environments for them to practise and develop these skills.

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[12] Sangeeta Karmokar, "Creative Entrepreneurship: Integrating Entrepreneurial Method and Experience of Learning by Doing," Journal of Creativity and Business Innovation, Vol. 2. (2016); Heidi M. Neck, Christopher P. Neck, and Emma L. Murray, Entrepreneurship. The Practice and Mindset (Thousand Oaks: SAGE, 2018).

[13] Heidi Neck, "Entrepreneurship requires practice: Part 1—The five practices," Forbes, September 6, 2014. https://www.forbes.com/sites/babson/2014/09/09/entrepreneurship-requires-practice-part-1-the-five-practices/ (accessed March 2, 2020).

[14] Heidi M. Neck, Christopher P. Neck, and Emma L. Murray, Entrepreneurship. The Practice and Mindset (Thousand Oaks: SAGE, 2018).

[15] Russel Korte, Karl A. Smith, and Cheryl Qing Li , "The Role of Empathy in Entrepreneurship: A Core Competency of the Entrepreneurial Mindset," Advances in Engineering Education 7, no.1 (2018).

[16] James C. Kaufman, Creativity 101 (Springer Publishing Company, 2016).

Building upon these 5 transversal skills, AYCH identified specific Key Enabling Technologies, creative and enterprise competencies that could be practised and developed throughout the different proposed approaches (see diagram).[17] The process through which these skills were identified was experimental and iterative itself: the set of skills was conceived, evaluated and improved as the result of continuous reflection on the process of Local and Transnational Creative Jams.

As we have seen so far, in addition to value creation for others, learning seems an essential dimension of entrepreneurship. "Entrepreneurship is as much about the change and learning that the individual entrepreneur experiences by interacting with the environment as the change and value creation the entrepreneur causes through his/her actions".[18] Within AYCH we believe that the best way to identify, practise, develop and ultimately learn entrepreneurship skills is by going through the experience of becoming entrepreneurial, that is, going through an "experiential" entrepreneurial learning process. To accomplish this, the AYCH project put in place events and activities at different scales where participants could experience themselves being entrepreneurial.

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[17] James C. Kaufman, Creativity 101 (Springer Publishing Company, 2016).

[18] Martin Lackéus, Entrepreneurship in Education. What, Why, When, How, Entrepreneurship 360. Background paper (LEED European Commission, 2015).

THE AYCH IDEA INCUBATION PROGRAMME

Although within AYCH we believe that it is not necessary to create a business to be entrepreneurial; we give our young participants the opportunity to plan and start their creative and/or social business. This is the purpose of one of the cornerstones AYCH approaches: The Idea Incubation programme, an acceleration programme where participants can bring their ideas to life. The programme is structured around two processes:

Business Support Programme: this includes a series of collective workshops on a variety of entrepreneurial and business skills.

Business Mentor Support: following the business support programme, this is a 1-2-1 support programme where specialists mentor young participants.

The Idea Incubation Programme is based on a long-term relationship and in-depth knowledge of the participants, their project, skills, needs, and their hopes and fears. Through this long-term experience, the participants can be mentored by specialists but also exchange ideas with their peers. After the workshops, participants can then make new contacts, exchange with potential users and customers, contact a network of industry stakeholders, speak to potential suppliers, pitch ideas and reflect on their achievements.

This AYCH model is adapted and put in place by each partner. For instance, one of the local Idea Incubation Programmes is Shape my Wave by the French partner l'École de design Nantes Atlantique. Shape my Wave offers personalised support to project holders so they can understand the business culture and acquire the tools to shape their own story and make their project grow. Over a 2-month programme, each young participant participates in 64 hours of collective workshops (3 days per week) to learn and use start-up tools and skills. This is followed by regular individual support sessions in the following months, permanent open access to the Fab Lab and co-working space, and access to the AYCH network.

The Idea Incubation Programme is perhaps the most complex and long-term cornerstone approach within the AYCH project. Although it is the first cornerstone approach we discuss in this book, it is the last approach we implemented during the project. It took time for us to understand how to implement it, considering the diversity of partners and the participants. We experimented and tested different tools and methods that worked best locally and transnationally to find innovative ways of implementing the Idea Incubation Programme.

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Brest Métropole Idea Incubation Programme, Brest
(France), January 2020.

A.1 Activity in focus: Platform by Pacificstream, Liverpool (UK)

Platform, the Liverpool base for the AYCH project, was set up to address the limitations of an education system that blights creativity. We established a learning environment that engages with young people and creates the right environment for developing creativity.

At Platform we believe that if you have an idea, you are a creative. We are an ideas hub, community and co-working space for budding creative and entrepreneurial thinkers, where they can work collaboratively, play with, and develop ideas. It is a place to work, something between a coffee shop and full incubation space (literally, as it is based next door to the coffee shop and across the road from the incubation hub Basecamp Liverpool). Young creatives can come and go, use the space, resources and help desk, seek advice from AYCH advisors and specialists, using it as a meeting place and a place to network.

Located in the heart of the Baltic Triangle, one of the most exciting and fast-growing areas of Liverpool, users of Platform are in the perfect location to connect and collaborate with other companies and enjoy the advantages of being a member of the wider Baltic Creative community. The studio space is fitted with bespoke sustainable workbenches designed and built by local designer-makers.

Our main aim is to nurture the entrepreneurial gene in and creative thinking of young people. We do this by providing young creatives with the initial support to develop their ideas in a creative environment, and offering a welcoming, accessible, non-formal and non-threatening work-space open to all. We want to encourage people to come together and create an inclusive, diverse and sustainable community. By fulfilling these services, Platform supports the development of Liverpool as a sustainable city.

Platform helps people working from the studio turn their ideas into reality. Their ideas can be developed with access to mentoring, networking events, workshops, and exposure to a range of experienced specialists. Furthermore, Platform encourages people to use their talents and ideas to meet today's challenges. We held a series of engagement events and activities to encourage

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Young people exchanging ideas about their projects at
Platform by Pacificstream, Liverpool (UK).

involvement in AYCH and the opportunities available through Platform. From 1-2-1 meetings participants could then choose a pathway that may lead to setting up a business and location in the creative incubator or through the support of their creative practice to develop their "portfolio" to enhance their job prospects.

Over the course of the last 4 years managing a creative incubator, we have learned that for our space to be successful we need to let participants work at their own pace. This means that we need to have a flexible approach and start with a business idea, not the business plan. We have learned to avoid "business speak", as this puts the young participants at a distance from the creative environment within which we want them to work. And, last but not least, we need to balance focus with fun!

As AYCH comes to an end, we need to make sure that the support and help provided through AYCH continues beyond the project and the participants move forward to setting up their art practice/creative business. This can be done by providing access to a virtual and physical help desk for advice. The networks and contacts made during the project should be maintained over the longer term; this is particularly important to UK participants post-Brexit. Including participants in the Platform/Pacificstream's database, will give them access to international opportunities and initiatives.
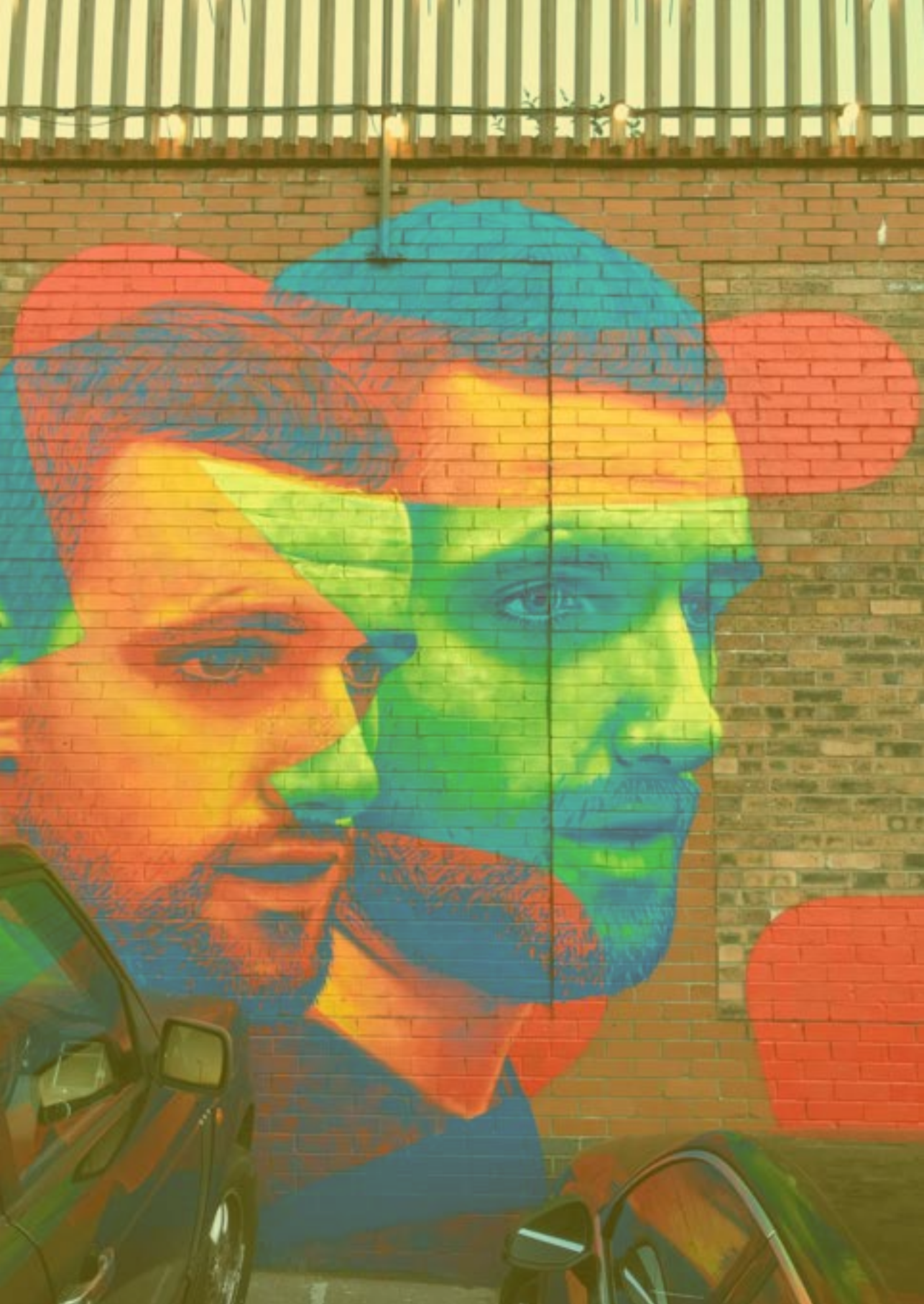
A.2 Participant in focus: Ruth Walker[20], Pacificstream, Liverpool (UK)

I am based at The Studio, an academy school (14 to 18 years provision) in the Baltic Triangle in Liverpool. The school educates young people for success in a digital world and for employment, entrepreneurship, a new business venture or further study in the digital media sector. Platform talked to the staff and students about the opportunities that AYCH can provide, and I was one of the students that needed help with a project that I was planning. I suffer from anxiety issues and autism but felt like I had an important idea and lots of energy to make it happen.

My new company, Liverpool Litter Picking Crew, was set up to address the litter problems of Liverpool and in particular the Baltic Triangle area. I needed a base from which to work, and Platform provided me with a virtual office and desk space for a day a week when I wasn't at school. With their help, I set up the company, promoted my idea and obtained the support of the Liverpool City Council. I applied to the Awesome Foundation for a grant. To do this, I had to present my business idea to a panel, and I received £500 to help me purchase equipment for the litter picking. I got insurance and did risk assessments for my team of pickers. Through AYCH, the advisors and mentors the project is linked to, I received additional support, including from the venues and companies in the area.

For my company to function I needed a "professional" environment from which to work: an office space where I could hold meetings and the services of a virtual office. In addition, I needed professional business advice, including business planning, presentation skills and finance.

I feel that through my experience at Platform, I gained confidence and business knowledge. Working with the AYCH/Platform team, helped me to relate to a different group of young people outside of my school and that supported my personal growth. The project has been successful but, unfortunately, has had to be on hold due to the Coronavirus pandemic.

[20] *The name of this participant has been changed for confidentiality reasons*

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Ruth Walker is living in Liverpool. Here, street art is used to illustrate the city where she lives.

A.3 Activity in focus: AYCH & Skills Development Opportunities, Atlantic Futures, Rennes (France)

AYCH builds on previous projects and aims to create a virtuous circle of learning as it disseminates its own work. As an example, AYCH drew upon the Atlantic Futures (AF) programme which was adopted in 2018 at the Atlantic Cities General Assembly. AF was a multi-layered partnership project about young talent and their education, enterprise, creativity and technological skills, which was open to young people from all socio-economic backgrounds.

The collaboration between AF and AYCH resulted in the AF-AYCH programme, which identified and implemented several actions to facilitate the synergies between skills and development opportunities. Notably, AF-AYCH provided an international experience to enhance the effectiveness of education and training programmes, and it enabled participants to gain autonomy. In doing so, AF-AYCH demonstrated the participants' experience, studies, volunteership, etc., thereby providing them with clear evidence to show in their CV and helping them to live independent, fulfilling lives. AF-AYCH generated diverse partnerships -from Universities to fishermen associations- with the aim to overcome the mismatch between skills and the labour market.

The principal value of AF-AYCH is to provide game-changing opportunities to all young people, regardless of their background, and to achieve this the AF-AYCH approach consists of following three main components:

1. Promote youth experts, by encouraging young people to facilitate workshops. As an example, Jérémy Gautier delivered a workshop on EU opportunities at the Transnational Creative Jam of Gijón.

2. Create internship/volunteer opportunities, by letting young people from different backgrounds familiarise themselves with EU projects with the opportunity to really immerse themselves in different activities. Atlantic Cities hosted 13 interns and 4 volunteers for extended periods of time.

3. Foster entrepreneurship skills development, by providing exchange opportunities. For example,

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Young people involved in the Atlantic Futures programme.
Rennes (France).

Fernando Losada (who was incubating his social business idea with AYCH partner Vida Lactea) was introduced to an experienced French entrepreneur, the Bug Association, and they were encouraged to exchange entrepreneurship skills.

By providing a personal long-term coach to every young person taking part before, during and after the process, AF- AYCH has clearly been able to fill the gap in the labour market with skilled young people. A personal coach is provided to those who are not selected for AF-AYCH so they can also benefit from constructive feedback. We are delighted that our work with young people has been recognised by the European Commission. This means that we will continue to support young people in their journey towards employment.

B. Addressing societal issues through creativity

A fundamental aspect of the AYCH project is that we stimulate creativity by focusing on complex societal issues. We give young participants the opportunity to understand the challenges of our time and to reimagine the way we live, work, play, eat, connect with others and move around.

We have observed that young people want to get involved in shaping a sustainable and inclusive future. Through AYCH they are supported to do so with multidisciplinary teams of specialists from the AYCH hubs. AYCH provides the opportunity to learn new creative, Key Enabling Technologies and social enterprise skills for a complex and changing world. The collaborative work and meeting with specialists take them outside of their comfort zone, and at the same time, this provides a strong sense of community and feeling of empowerment.

All the activities proposed by the AYCH partners and their hubs take place in non-formal education settings: the partner's hubs, warehouses, old factories and inspirational spaces like the Art Gallery Tate Modern in London or the innovative building of the Met Office in Exeter to deliver some Creative Jams. These large open inspirational spaces allow all participants to move around, have dynamic and constant exchanges. These settings aim at enabling and encouraging collaborative making, crossing a wide range of disciplines, skills, equipment and expertise.

Young participants, mentors, specialists, AYCH partners and external partners are all equal. We propose a non-hierarchical safe learning environment where all participants have the opportunity to engage, learn, experiment and make social and creative projects collaboratively.

The AYCH Creative approach ingredients are:
- A forward-thinking mindset
- A combination of innovative and open spaces
- An ecosystem of materials, technologies, practices, ideas, people
- A mix of young people (students, unemployed, artists, entrepreneurs)
- Collaboration not competition

THE AYCH CREATIVE METHODOLOGY

The AYCH Creative methodology is structured around 3 phases. These phases are more clearly observed in the short format approaches such as the Local Creative Jams and the Transnational Creative Jams because they last around 2 and 3 days. However, this methodology is transversal to all the AYCH cornerstone approaches and can be deployed throughout a longer participant's journey.

Discover

One of the first steps, when we engage with young people through the AYCH activities, is to introduce them to critical societal themes such as circular economy, transport and mobility, community, biodiversity, health and well-being, low carbon and many more. This introduction can be made with the help of audio-visual tools, ice-breaker tools and Speculative Design tools. However, real-life immersion and direct observation of the surroundings is a key aspect of the discovery phase. As part of this initial step, young people define a specific and meaningful goal that they want to work on.

Explore & Learn

This is the moment in which the participants get the chance to learn creative, enterprise and Key Enabling Technologies skills. They can go through this learning experience in their local hub or participate at collective workshops at the Transnational Creative Jams. At this point, young people can start exploring and opening up to new and different ideas.

Solve & Create

This is the final and critical phase of the AYCH creative approach. This is the moment where participants bring their ideas to life through quick and dirty prototyping. Participants draw upon their creative, enterprise and technological skills to make sense and shape their ideas in a tangible and communicable way. In the context of a local or transnational event, this phase usually takes the form of a Creative Challenge or Hackathon.

In AYCH, we see this process as experimental and iterative. In the case of Local Creative Jams and Transnational Creative Jams, the phases generally have a clear start and finish set by the boundaries of the event. However, in a participant's journey, these phases might overlap, iterate and take place

in a less linear way. In the next section, we will see how the Design Thinking methods and tools feed into and overlap with the AYCH creative methodology.

THE PARTICIPANTS' JOURNEY

To accompany the young participants in their creative entrepreneurship experience, we have put in place a journey they can go through during their AYCH experience. Within AYCH, we value diversity and particularities that each partner and their hubs can bring to this process. Rather than seeing the AYCH experience as a prescriptive model, we see it as general guidelines that can be adapted and enriched by partners in their day to day practice. We encourage these practices to be shared among partners during the Transnational Creative Jams.

ATLANTIC YOUTH CREATIVE HUB PROJECT

PARTICIPANT JOURNEY

1

Initial conversation

Have your initial idea that 'Light buld moment'. Let's have a chat about it and see where go from there. We can use the tool AYCH Quest.

STAGE A

Step 1 is the initial landing point - entry can be through Creative Jams, KET Workshops, Club Session or a University/College Course.

2

Idea thinking

Explore the idea in more detail. Look at how you seek and share 'Knowledge' to take your idea forward.

STAGE B

Step 2 & 3 are about working with your local Creative Hub to conceptualise your idea using Design Thinking to bring your idea to life.

3

Idea generation

Turn your idea from theory to reality by putting it through a robust design-driven methodology to see how it stands up in real world conditions.

4

Initial prototyping

Test out the idea by prototyping your goods or services using the lastest methods, such as 3D Printing, Business Canvas, etc...

STAGE C

Step 4 & 5 is where we will map out to take your idea forward via Idea Incubation Programme, Residencies, Internships, etc...

5

Idea pitching

Sell the idea to others by learning how to present and pitch an idea. Learn what the experts are looking for in you and your idea.

6

Idea assessment

Meet the Dragon's (the scary bit). Put your idea through its paces where it will be assessed by experts and real users for success readiness.

STAGE D

Step 6 & 7 are for us with you to evaluate where your idea is up to and where you have got to and whether is has got off the ground as yet.

7

Idea validation

Share your idea with others in a safe space to confirmation from them what you already know, this idea is a winner.

8

Idea execution

Now take the leap forward and put your idea into action or take it forward with another partner to see what that potential career may look like.

9

Live the dream!

Come out of your development phase to become a business owner or embark on a new career.

STAGE E

Step 8 & 9 take you forward on your journey beyond the AYCH project but with the ongoing support of your Creative Hub when required.

B.1 Activity in focus: Idea Incubation Programme, Plymouth College of Art (UK)

The AYCH Idea Incubation Programme aims to provide the fundamental business skills required to plan and start a creative and/or social business. It is structured around a 3-month business support programme with workshops, after which the young participant has 6 months of business mentor support with 1-2-1 support. Through this acceleration programme, the young participants are taken out of their comfort zone. They experiment around new ideas and increase their business knowledge. Through the programme they become part of a network of entrepreneurs, industry contacts and business experts. By the end of the programme, participants will have a defined business plan to start their business.

It's a programme open to anyone interested in bringing their ideas to life or simply wanting to learn more about entrepreneurship. Our incubation cohorts gathered a wide range of creatives and social entrepreneurs: from students and alumni to aspiring entrepreneurs and unemployed young people from Devon and Cornwall.

The programme follows a "learning by doing" approach, which means that the participants learn business skills and apply these directly to their ideas. It starts with a series of up to 14 workshops about a range of topics, such as: developing ideas using Design Thinking, social entrepreneurship, business model generation and strategy development, value proposition design, product diversification, brand creation, customer insight, marketing in the digital world, social impact and theories of change, intellectual property rights, legal structures and governance, financial management, business planning, and pitching and presenting. These weekly workshops usually last for two hours and include group exercises, break time, group discussion and feedback. The structure has proven to be key to building connections and collaboration within the group. At the same time, every participant understands each business aspect and can apply it to their own idea. Each project is at a different stage of development, as a consequence participants learn from each other. After the workshop series, participants make new contacts, exchange with potential users and customers, contact a network of industry stakeholders, speak to potential suppliers, pitch ideas and reflect on their achievements.

PREVIOUS PAGE
Ray Goodwin. Early evening informal catch-up meeting of young people involved in the Idea Incubation Programme, Plymouth College of Art, Plymouth (UK), 2020.

We have learned that it can be quite daunting for young people to sign-up for this type of programme because not everyone has the confidence, ambition or knowledge to contemplate developing ideas and solutions, let alone starting a business. With experience, we realised the importance of using the right terminology; for example, instead of talking about "starting your own business" we talk about "bringing your impactful ideas to life".

The other element that helps to engage participants, was to focus on social enterprise: how to make an income that will benefit people and the planet. This has a great appeal among passionate young people. The focus on social entrepreneurship follows on from Creative Jams where we spend 2-3 days designing solutions, products and services to solve societal challenges.

B.2 Participant in focus: Laura Quinn, Plymouth College of Art (UK)

I am an Irish glassmaker and designer. I completed my master's degree in 3D Design Crafts with distinction from Plymouth College of Art in 2019. I am currently an ambassador for AYCH. In April 2019, I had the exciting opportunity to travel to the town of Gijón in Northern Spain. A few weeks prior, I had answered the call out from a poster for young designers to take part in a Creative Jam focused on sustainable design. My research revolves around the use of digital design and hand-blown glass to make a sustainable artisanal practice. So naturally, this call out caught my attention. Admittedly, I did not know much about the Atlantic Youth Creative Hubs who were hosting the event. Still, nonetheless, I submitted my application and later I received the great news that it had been accepted - time to pack my bags and take a little break from my MA studies!

I arrived at the train station early in the morning, and one by one, the whole Plymouth College of Art team arrived. We began the mammoth journey to Gijón via London and Asturias. The journey allowed a chance for us all to get to know each other. I was incredibly surprised by the diverse range of practices we came from; from illustration to fashion, to product design. After nearly 15 hours of travel, we arrived at our hotel, right on the seafront in Gijón. We all agreed that we felt instantly at home here. The weather was warm but not too hot, and occasionally rainy - what we're used to. But more than that, Gijón seemed to remind us all of Plymouth with its maritime history and town layout, and relaxed seaside mindset. The AYCH Creative Jam took place on the university campus in Gijón over the next three days with young attendees from Portugal, Spain, France, England, and Northern Ireland. There was a series of workshops on subjects ranging from anthropology to eco-design to electronics. Our very own Ben Mundy from Fab Lab Plymouth facilitated a 3D printing workshop that had a brilliant response - particularly from attendees who wouldn't normally have access to or experience of a Fab Lab. On the final day, with all the new knowledge and skills we had learned, we were randomly allocated to a team and mentor. During a six-hour intense Hackathon each team had to come up with, prototype and create a presentation of an idea. There was great freedom at this point to develop whatever idea we were excited by and believed in. My team, influenced greatly by the idea of co-designing and sustainable cities and communities, developed an online platform to allow town members and local authorities a place to design together their shared spaces within their community. The next stage was a pitch in front of a panel. Twelve teams

in total pitched, and six were selected to present in front of the full audience of attendees, mentors and staff - over 70 people! I was blown away to see how each team reacted to the challenge and to see the creative responses - an audience interactive virtual reality simulator to bring realities of devastating climate change to our city centres, and an online community called Seed Link to share agricultural knowledge for homegrown fruit and veg, to name a few.

The three days spent at the event in Gijón were truly wonderful and path changing for me. I am so glad to have been offered the opportunity by the AYCH team here at Plymouth College of Art. As a result, I met and talked to others engaging in exciting sustainable manufacturing research, and I even managed to sell one of my products. In the year following my initial participation in an AYCH event, I have become an ambassador for the project and have helped to facilitate international online sessions with AYCH during the Coronavirus crisis. This has allowed me to connect with another AYCH ambassador working in design in Mexico. My experience and the support I have received from AYCH leaders and partners has been tremendous for building my confidence in Design Thinking and teaching, communications and team leadership. I have subsequently started a new employment as the Glass Technical Tutor at the University for the Creative Arts in the UK. In this role, I use these key skills that I had the confidence to develop from my experience in AYCH. Taking part in this project has reassured me that there is an energetic, and supportive network concerned with sustainable and innovative design, to travel and work with to continue my research and making practice beyond my studies.

C. The Design-driven approach

Design Thinking has been identified and implemented as a learning through method in entrepreneurship education.[21] The term Design Thinking was coined by the design agency IDEO and the Hasso Plattner Institute of Design at Stanford University in the '90s. However, the term has roots in an exchange within the global design community that has been unfolding for decades.[22] Multiple definitions and ways of representing the Design Thinking process have emerged and evolved since. David Kelly defines it as "a method for how to come up with ideas. These are not just ideas, but breakthrough ideas that are new to the world, especially with respect to complex projects, complex problems".[23]

The Design Council depicts the design way of thinking as a double diamond process (see below) which represents two different and complementary ways of thinking :[24]

Divergent thinking : exploring an issue widely and deeply to open up to plenty of perspectives on it, it is a free-flowing, spontaneous and expansive form of thinking. IDEO defines it as creating choices.

Convergent thinking : taking focused action and making choices that are deliberate and conscious.

The Design Thinking process is best thought of as a system of overlapping spaces rather than a sequence of orderly steps or a linear process. Four big spaces have been identified in this iterative

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[21] *Gabriel Linton and Markus Klinton, " University entrepreneurship education: a design thinking approach to learning," J Innov Entrep 8, 3 (2019) https://doi.org/10.1186/s13731-018-0098-z; Anna Kremel and Katharina Wetter Edman, "Implementing design thinking as didactic method in entrepreneurship education. The importance of through," The Design Journal, 22: sup1 (2019): 163-175. https://doi.org/10.1080/14606925.2019.1595855*

[22] *IDEO, Did IDEO invent design thinking?. https://designthinking.ideo.com/faq/did-ideo-invent-design-thinking (accessed August 27, 2020).*

[23] *Maria Camacho, "In Conversation David Kelly: From Design to Design Thinking at Stanford and IDEO," The Journal of Design, Economics, and Innovation, V. 2, 1 (2016).*

[24] *Design Council, What is the framework for innovation? Design Council's evolved Double Diamond, https://www.designcouncil.org.uk/news-opinion/what-framework-innovation-design-councils-evolved-double-diamond (accessed September 4, 2020).*

process.[25] For each of these spaces, there are specific tools that can facilitate the flow of the process and that encourage participants to work collectively. Some of them are classical Design Thinking tools that can be found in many open source Design Thinking toolkits (e.g. designkit.org by IDEO, Design Thinking Bootleg by d.school). However, what makes this approach interesting is that the partners and facilitators can conceive and put in place new and better-adapted tools for the specific needs of the audience and the subject treated:[26]

Discover: it helps participants to understand better, rather than simply assume what the problem is. It involves directly observing, speaking to and spending time with people who are affected by the issues. Practising empathy is a critical aspect of discovering. Some of the Discovery tools that AYCH use are: direct observation, shadowing, and interviewing.

Define: the insights gathered from the discovery phase can help participants to define the challenge in a different and precise way.

Develop: it encourages participants to give different answers to the clearly defined problem, seeking inspiration from elsewhere and co-designing with a range of different people. During the development, participants engage in an ideation process where the aim is to come up with as many ideas as possible.

Deliver: it implies making the ideas tangible and testing out different solutions at small-scale, rejecting those that will not work and improving the ones that will. Prototyping is a fundamental process for implementing the idea. Within AYCH, young participants prototype as they learn Key Enabling Technologies that allow them to bring their ideas to life.

Although the process is represented in this systematic way for communication and pedagogical purposes, Design Thinking is a highly iterative and experimental process. Design thinkers might continue discovering new elements through immersion in a real-life context, whilst at the same time initiating an ideation process. And although prototyping is associated mainly with the implementing or delivery phases, design thinkers will also engage in prototyping very early in the process. Making their ideas visible and tangible early allows them to build up their thinking and stimulate their capacity to produce more valuable ideas.

[25] *Design Council, What is the framework for innovation? Design Council's evolved Double Diamond, https://www.designcouncil.org.uk/news-opinion/what-framework-innovation-design-councils-evolved-double-diamond (accessed September 4, 2020).*

[26] *For deeper and more detailed information on the tools you can visit the AYCH Wiki: http://wiki-aych.lecolededesign.com/doku.php?id=start*

In AYCH we draw upon the Design Thinking and its tools in order to put in place our creative approach: Discover, Explore & Learn and Solve & Create. We mainly use already existing or tailored Design Thinking tools in the phases Discover and Solve & Create of our creative approach. In the Discover phase we have used Design Thinking tools or Speculative design tools that allow the young participants to open their minds to new ways of perceiving and understanding the subjects they will work on. In the Explore & Learn phase young participants explore and learn through making Key Enabling Technologies of their interest. In the last phase, Solve & Create we use the quick & dirty prototyping approach for the young participants to deliver and communicate their ideas.

Design Council's evolved Double Diamond
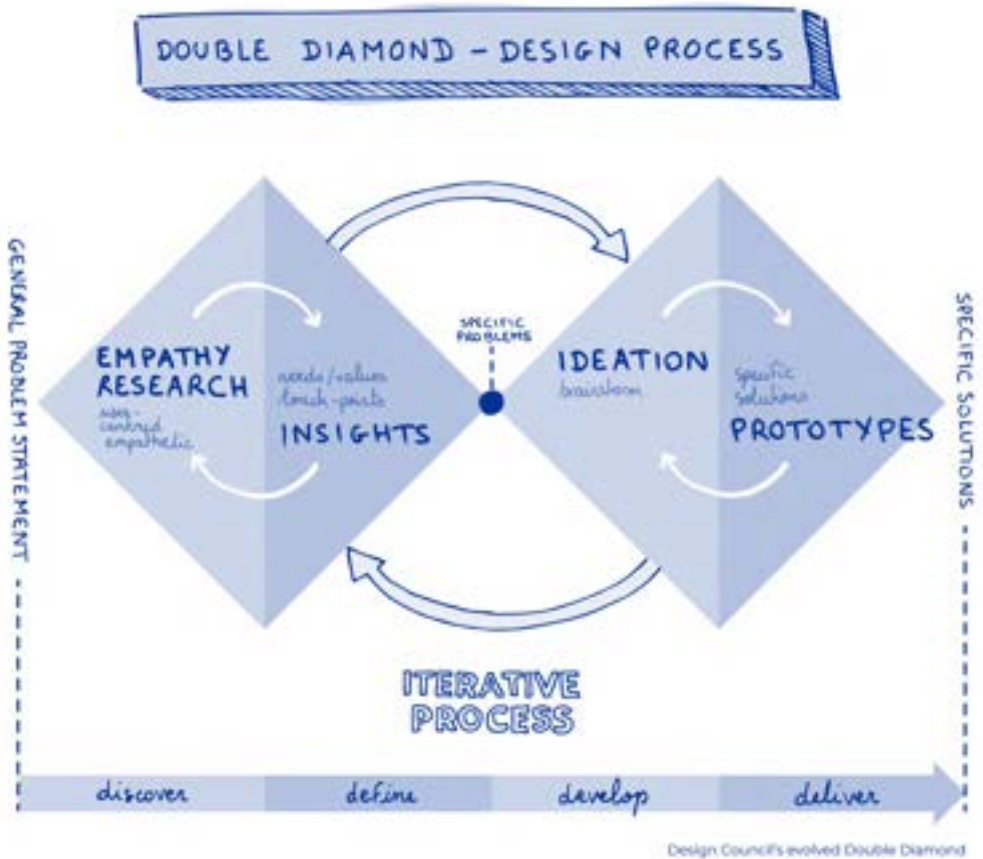
A skill in Design Thinking that is fundamental when facing and trying to come up with ideas amid complexity and controversy is what has been identified as *Integrative Thinking*. Integrative Thinking is the capacity to hold conflicting ideas in a constructive, almost dialectic tension and using that tension to think your way toward new, better ideas.[27] Within AYCH, we believe that if you don't integrate complexity in a creative process, you will most likely create another problem. In our design-driven creative approach, we encourage young participants to acknowledge and better understand the multiple experiences and different viewpoints that exist around a subject. In this way, instead of being a barrier to creation, acknowledging controversy becomes a catalyst for innovation. Embracing diversity, controversy and complexity pushes our participants to reflect on the intended and unintended consequences of their ideas.

SPECULATIVE DESIGN: INTERROGATING ALTERNATIVE FUTURES

Speculative Design (also called Critical Design, Design Fiction, Discursive Design, Interrogative Design or Ludic Design) is an approach to creativity and innovation that thrives on imagination to open up new perspectives on complex problems.[28] By speculating about how things could be in the future, this approach inspires and encourages people to freely imagine other ways of being, doing and thinking in the present.[29]

If Design Thinking is concerned with complex problem solving as they are in the present, here-and-now context; "design speculations can give form to the multiverse of worlds our world could be". Speculative Design is a "form of dissent expressed through alternative design proposals. It aims to be inspirational, infectious, and catalytic, zooming out and stepping back to address values and ethics. It strives to overcome the invisible wall separating dreams and imagination from everyday life, blurring distinctions between the 'real' real and the 'unreal' real".[30]

[27] Roger L. Martin, "How Successful Leaders Think," *Harvard Business Review*, June, 2007.

[28] Leon Karlsen Johannessen, *The Young Designer's Guide to Speculative and Critical Design* (2017). https://www.ntnu.edu/documents/139799/1279149990/16+TPD4505.leon.johannessen.pdf/1c9221a2-2f1b-42fe-ba1f-24bb681be0cd (accessed June 23, 2020); James Auger, "Speculative Design: Crafting the Speculation," *Digital Creativity*, 24 (2013) https://doi.org/10.1080/14626268.2013.767276

[29] Anthony Dunne and Fiona Raby, *Speculative Everything: design, fiction, and social dreaming* (Cambridge, MA: MIT Press, 2013).

[30] Anthony Dunne and Fiona Raby, *Speculative Everything: design, fiction, and social dreaming* (Cambridge, MA: MIT Press, 2013), 160.

This future-oriented form of thinking requires new and specific methods. Methods and tools that encourage people to embrace their hopes, dreams and fears for tomorrow. Finding inspiration beyond design and exploring the playgrounds of arts, cinema, literature, music, sculpture but also science, ethics, politics and science fiction, is critical for crafting ideas and scenarios about the future.

Within AYCH, we aimed at using Speculative Design as a way of encouraging young participants and partners to collectively question and reimagine their future and nourish their creative experience. More specifically, within the AYCH project, we developed an iterative and experimental way, a brand of Speculative Design tools called AYCH Futures. This series of serious collaborative games were used during Local Creative Jams and at the Transnational Creative Jams. Two main games were developed: AYCH Futures Cities & AYCH Stranger Jobs.

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Young AYCH Ambassadors team, creators of the AYCH Quest tool.
L'École de design Nantes Atlantique, Nantes (France), 2019.

C.1 Activity in focus: AYCH Futures, Grand Angoulême & L'École de design Nantes Atlantique (France)

In AYCH, we are convinced that imagining alternative futures is a good way for our young participants to better understand the current complex environmental and social challenges society faces. With that in mind, we developed a series of creative tools called AYCH Futures. The first of these "serious games" -called Bright Mirror- was created during a Local Creative Jam at Angoulême with the input of illustrator Olivier Balez. Subsequently, through further testing with participants and improvements, multiple iterations of this method were developed, and other AYCH Futures tools were created (such as AYCH Futures Cities & Stranger Jobs)
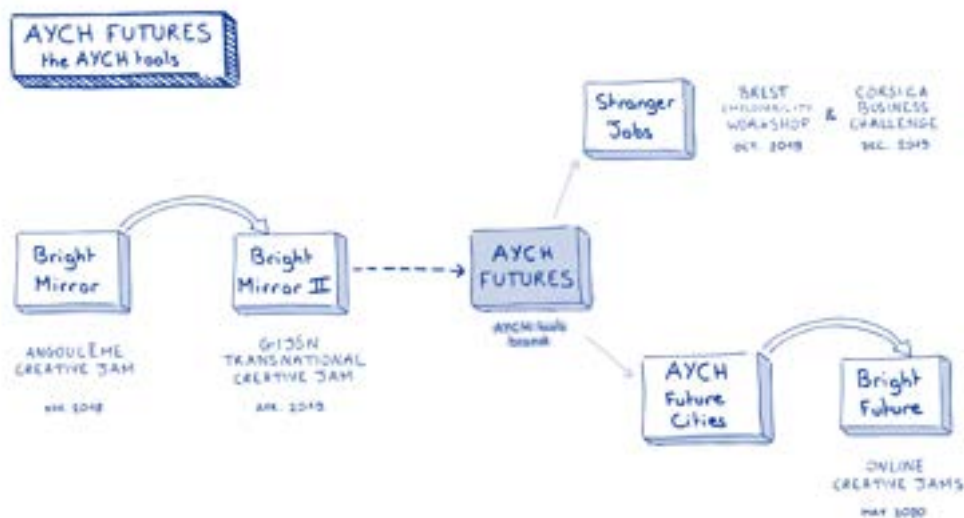
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The Bright Mirror tool during the Gijón Transnational Creative Jam. Gijón (Spain), April 2019.

The fictional nature of the AYCH Futures tools series allows participants to let their imagination run free: diverting away from what they think "should be" and opening their minds to other possibilities. Picturing imagined, desired and undesirable futures becomes a medium to foster the participants' creativity and innovative capacity. Through this projection into the future exercise, young participants question the role of highly technological future scenarios and develop a critical view of technologies. For this to happen the AYCH Futures tools are characterised by:

- Stimulating collective intelligence by drawing on constant exchanges between the participants and the facilitators.
- Following a collaborative serious game experience: clear rules, specific timing, specific goals and reward system.
- Using powerful and different media: photos, videos, audio to challenge preconceived ideas about the subjects. Thereby creating a clear image of the relevant context and feeding the participants' imagination. This requires time for thorough preparation, producing relevant audio-visual media that generates "awe" among participants.
- Encouraging different forms of expression of ideas: e.g. drawing, writing music or poems, illustrations, collages.

In addition to these characteristics, the presence of a trained facilitator also is essential to guarantee "the flow" of the activity, to keep up the young participants' energy levels and to encourage participants to think alternatively.

As an AYCH brand, AYCH Futures opens up possibilities for further tool creation. The tools created under this AYCH brand can be adapted to different subjects or issues, to different audiences and to different contexts of use (e.g. online use). As we saw, it started as a speculative game for stimulating idea generation around the future of cities and later on the principles were applied to develop the Stranger Jobs tool which questions the future of the work experience. In the context of the Coronavirus pandemic that imposed a period of confinement, online, open-source versions of the AYCH Futures games saw the light and proved highly popular and successful. The AYCH Futures principles, versions and possibilities for further online development can be found in the AYCH Wiki **http://wiki-aych.lecolededesign.com**

C.2 Participant in focus: Louise Bragard, Marguerite Gueret and Jules Riché, L'École de design Nantes Atlantique (France)

We are Master's Design students at the City Design Lab at L'École de design Nantes Atlantique. Louise and Jules trained as Interior Designers and Marguerite as a Product Designer. In AYCH we contributed to the development of the serious game Bright Mirror which helps to gather people from different backgrounds in a creative session around the future of cities. Louise, Marguerite and our colleague Maurine Guingamp tested the Bright Mirror tool during a session we facilitated at the Transnational Creative Jam Gijón 2019. Later on, Jules and our colleagues Maurine and Benjamin Garnier, participated in the development of another AYCH Futures tool: The Stranger Jobs game, tested in Brest and Corsica.

One of the main challenges that we encountered whilst developing Bright Mirror, was to find a way to simplify the design process through a fun and easy game. Also, we had never facilitated groups before, so it proved challenging to manage the groups, put them at ease, help them understand the game, address their difficulties, answer their questions, whilst also keeping the time and managing the technical and logistical aspects of the activity. It was important to feel confident in our work and find ways to work as a team by defining each member's place and role in the process.

By being part of AYCH we discovered and deeply understood a different way to use design: as a communication tool for bringing people together and fostering their creativity. By facilitating the creative sessions, we assumed responsibilities and learnt skills that are new to design students: conceiving creative tools, managing logistics for a creative session, learning how to communicate with people who have a different language and/or (non-creative) background, adapting our speech to the audience, skills for a "pitch video". All these essential soft skills helped us to find an end of studies internship.

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Louise Bragard, Marguerite Gueret, Jules Riché and the rest of the team preparing a Stranger Jobs workshop. Brest (France), September 2019.

We were also part of Shape My Wave, the AYCH Idea Incubation Programme run by l'École de design Nantes Atlantique. This programme is supporting us to realise an idea that won a Hackathon into reality. Through this incubation programme, we are practising entrepreneurship skills that we wouldn't have developed in a regular Design programme. And the hands-on approach, allows us directly to launch our project called "Klaire": from formulating an action plan, to marketing communication, client relationships and accessing a network of experts. The Incubation programme forms the transition between our studies and life after graduation.

After winning the Hackathon, we kept developing the Klaire project with the prospect of launching a collective with 3 other designers. However, more recently, we have focused on our individual projects:

Marguerite - I am currently doing an internship at a sexual health association, where I apply everything I learnt through AYCH. I create serious games and communication tools around sexual health issues and facilitate meetings and exchanges with young people around these tools. I love what I do, so after my internship, I hope to continue to work around sexual health, creative tools and serious game conception as well as facilitation.

Louise - I am currently doing an internship in a retail and interior design agency. I have realised that I am still working in the same way as during my participation in AYCH, and feel that this is really beneficial. I think my view on how an idea comes into being has expanded, and I can now be more flexible and efficient within my work. In the future, I would like to keep developing creativity tools that can help me and my colleagues work better.

Jules - I am doing an internship at an architecture and design agency. I have developed my skills between the "tailor-made" unit and the "architecture" unit, with the perspective of discovering the different applications of design and learning the tricks of the trade at an agency. My experience with AYCH allowed me to very quickly blend with the team and offer different skills than those expected. My ultimate goal is to develop a design that is focused on the imagination of the future world. To do that, many of the skills I attained through AYCH are essential; in particular, knowing how to communicate my research and work.

INNOVATIVE LEARNING ENVIRONMENTS

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Sarah Packer, Plymouth College of Art. Local Creative Jam at The Clay Factory, Plymouth City Council Youth Service, Plymouth College of Art and Space. Plymouth (UK), 2018.

A. Learning beyond the classroom

We recognise that many of the young people we work with do not engage comfortably with traditional educational approaches; they have been "turned off" from education. When working with young participants, we try to plan activities from a transformative learning perspective, which is very different from formal traditional transmissive educational approaches. In a transmissive approach, the teachers place themselves in between the subject and the students, digesting, interpreting and explaining the subject to the students. In a transformative pedagogy, the teachers and students participate in the collective exploration of a subject, starting by acknowledging and sharing what everyone around the table knows about the topic in question.[31]

The transformative learning approach claims that through reflection, experiential learning and being exposed to situations that are out of the comfort zone for learners, the latter can develop their own understanding of the world and themselves, allowing a potential change to their perspectives and frames of references.[32] In this sense, the young participants' transformative experience is at the centre of how we conceive and put in place the AYCH cornerstone approaches—from the long-term Idea Incubation Programme, going through more collective intensive Local Creative Jams to the Transnational Creative Jams.

The AYCH learning experiences go beyond the classroom in terms of timing, space, ways of interacting with the facilitators, with the peers and the ways of thinking of every element of that experience. The aim is to build a sense of play and reduce the transmissive feeling of the traditional classroom experience. All the planning elements in AYCH are thought of from the perspective of the young participant.

An essential aspect of our approach is that the participants can shape their own learning experience.[33] Although the timing and learning objectives are structured: set activities, timed

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[31] Stephen Sterling, *Sustainable Education: Re-visioning Learning and Change. Schumacher Briefings (Green Books, 2001).*

[32] Hannah Strange and Heather J. Gibson, "An investigation of experiential and transformative learning in study abroad programs," *The Interdisciplinary Journal of Study Abroad 29, no.1 (2017): 85-100.*

[33] Alan Rogers, *The Base of the Iceberg: Informal Learning and Its Impact on Formal and Non-formal Learning (Barbara Budrich Publishers, 2014).*

workshops and lunch break. The participants make choices with regards to the workshops they want to take part in, the specialists they wish to meet and the groups they want to be part of and when to take their break times. For instance, we are clear that participants and groups might choose to take a break when they feel like it. In that sense, we ensure that there is good food available and spaces where they can have informal exchanges with other participants and specialists throughout the day. The rooms are set up and furniture laid out to encourage groups to approach learning as a shared exploration with their chosen specialists. We consider these spontaneous exchanges as valuable and rich for the learning experience as any other set activity.

In AYCH we acknowledge and value the diversity of participants' previous experiences as well as their particular needs. Moreover, we believe that through the meeting of this diversity of previous experiences, there can be a shift in individuals' perspectives and understanding of the issues they work on and themselves. Partners and specialists encourage and foster this crossing of perspectives by building up a relationship of trust with the participants where they can provide intensive but very flexible support along the participants' way. This also supposes a shift in the way the partners and specialists see their role and go through the process. Many of the partners and specialists have highlighted how their participation in an AYCH has been a shifting learning experience for themselves.

Finally, the challenges that we are looking at within AYCH (sea level rise, social inequality, energy, mobility, community building), will have an impact on the participants' day to day life. By focusing on current societal issues that concern the young participants, we put a meaningful framework to creativity that makes the AYCH learning experience engaging, stimulating and hopefully transformative for them. We approach these complex issues with optimism, opening-up to new possibilities and having fun in the process. By doing so, we show to young participants that we trust them and we believe in their capacity to come up with impactful ideas and projects for their own future.

A.1 Activity in focus: Exmouth Local Creative Jam, Space (UK)

During this 2-day tech Jam, young people between 14 and 19 years old were offered the opportunity to experience Key Enabling Technologies (KET) with professional mentors. Working collaboratively, participants were challenged to reimagine their town - looking for solutions to problems they see around them. The two main aims of the Jam were to inspire and guide young people through a journey exploring creative ways to make their town better using KET; and to encourage participants to take their ideas further as young entrepreneurs. It became evident to participants that through the Jam they gained entrepreneurial skills and knowledge "for life", and that their formal education hadn't offered enough access to learning these skills.

The Jam took place at the town's youth centre and Propeller, an adjacent modern co-working space comprising a community of start-ups, creatives and engineers. For the Jam to succeed it needed to have a strong "local feel". To this end, we invited members of the local council to enjoy the Jam, and worked closely with people from Propeller.

The youth work methodology we employed, uses transformative learning approaches. We created a collaborative learning environment. We also ensured that the creative space was welcoming and designed to energise focus and push participants whilst respecting the fact that everyone participates voluntarily.

The Exmouth Local Creative Jam was designed to flow so that young participants that are new to each other get "caught up" in the process, which allowed them to "form, storm and norm" effective working groups. We ensured that activities and expectations were age-appropriate: it was clear that where possible we needed to reduce or remove activities that were presented as a lecture. We felt it was important to ensure members of existing incubation groups were included in the delivery of the Jam as part of their own learning and growth. This process validates their recently acquired subject-specific knowledge and is of value to the new participants; young people often learn best from those who are closer to their own age.

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Exmouth Local Creative Jam at The Hive, Space and L'École de design Nantes Atlantique. Exmouth (UK), 2019.

EXMOUTH LOCAL CREATIVE J

discover

INTRODUCING THE THEME
REIMAGINE YOUR TOWN
THE EXMOUTH OF THE FUTURE

TOOLS PREPARATION

CITY DESIGN LAB
L'ÉCOLE DE DESIGN
NANTES ATLANTIQUE

TREASURE HUNT
IN EXMOUTH

TECHNICAL
WORKSHOPS

3D PRINTING

FILM MAKING

VIRTUAL REA

CODING

ICE BREAKER

TWO WEEKS
BEFORE

DAY 1
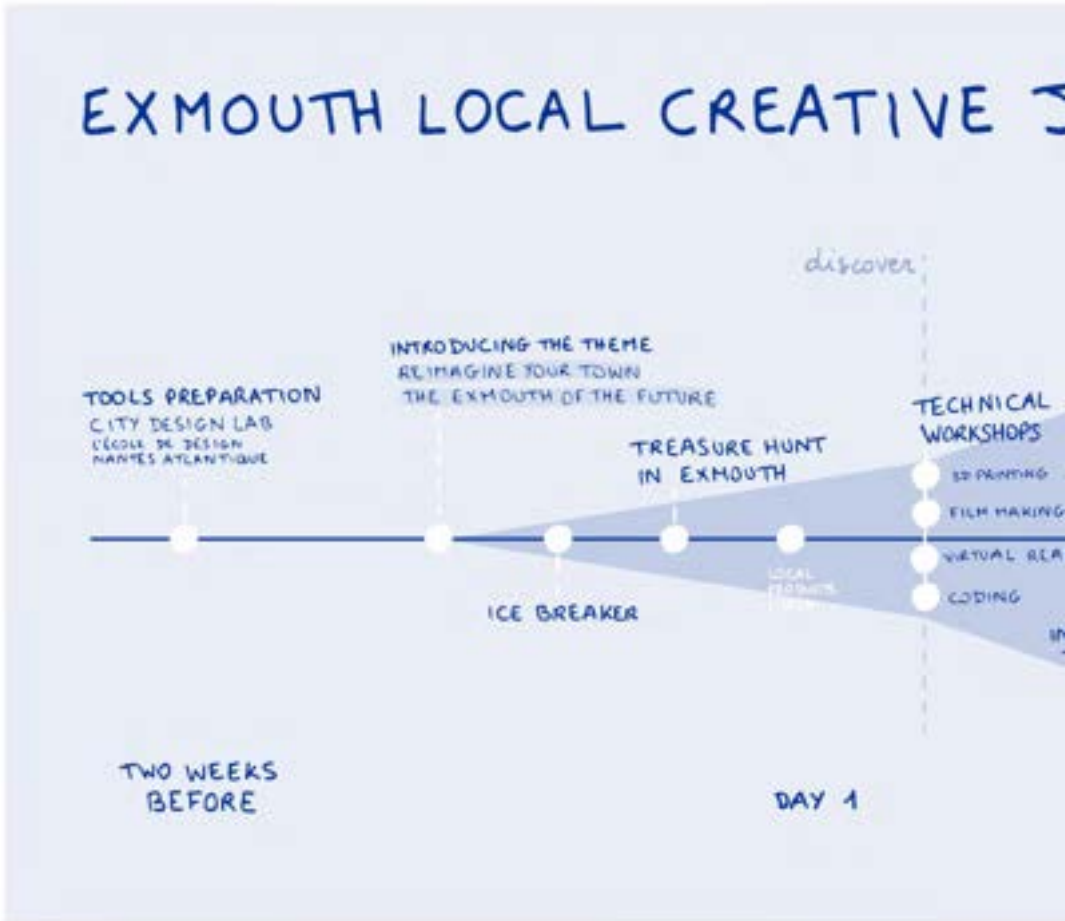
The most important feature of a Jam is the tech involved. Participating in a Jam is a unique opportunity for many of the young people to have access to technologies that are "hard to get", due to their prohibitive cost or relative newness to market. Participants need to be excited and inspired; the chance to play with a range of different equipment raises the participant's curiosity, which then leads to them choosing to continue and grow with the Jam.

It did prove difficult to connect AYCH meaningfully to local schools. A new approach to KETs workshops has been planned, trialling delivery of them on school premises. These will need to be planned significantly ahead of delivery dates, as the less flexible, curriculum-led approach followed by schools restricts their ability to accept new activities at short notice. Doing these workshops in schools may open a conversation about using this approach as an opportunity to model transformative educational methods for school-based practitioners.

SAM PROCESS

discover define
develop
deliver

WARMING UP ACTIVITY

FINALIZING PROTOTYPE + PITCH TRAINING

PROTOTYPING

JURY DELIBERATION

FEED BACK TO EACH GROUP

...LITY

INTRODUCTION TO THE NEXT DAY PROGRAMME

DESIGN THINKING WORKSHOP

LOCAL PARTNERS LUNCH

PRESENTATIONS

DAY 2
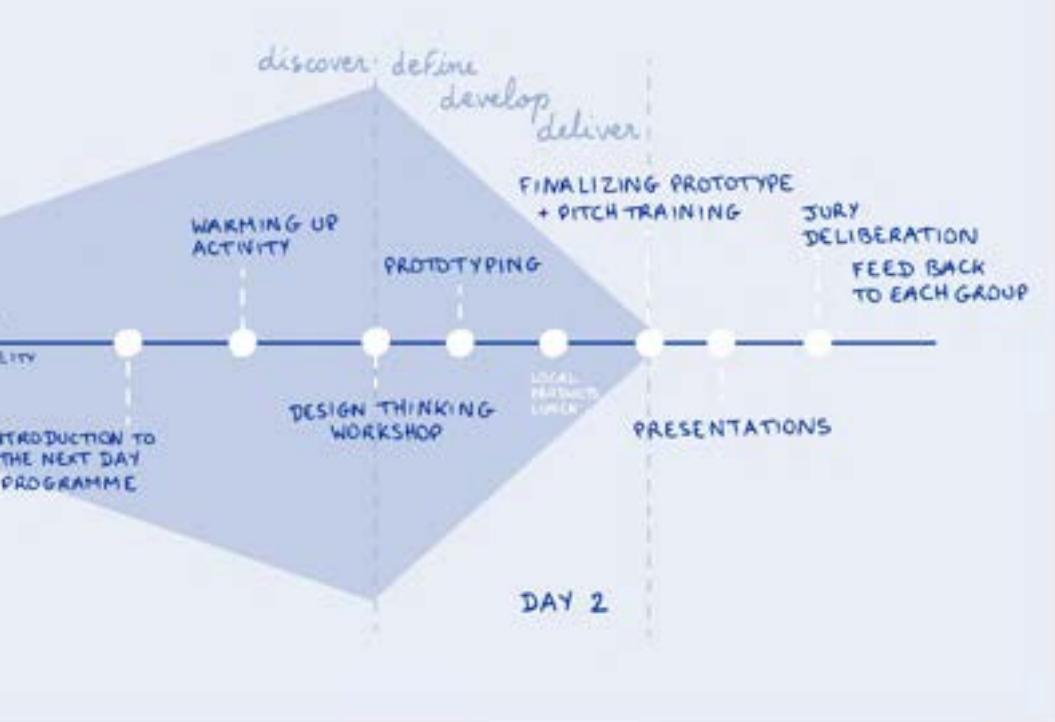
Another obstacle we encountered was to reach the widely spread rural population living in a large county such as Devon. We explored online platforms to increase our work with young people across the region, when there are limited levels of staffing. The resulting platform has successfully opened up new ways to work with young people within our wider youth work. Fundamentally, however, we recognise there is no substitute for hands-on experience and face-to-face working in groups.

A.2 Participant in focus: Claire Higgins and Salina Rawles, Igneous Interactive, Plymouth City Council Youth Service (UK)

We met through attending "Out Youth" sessions, a supportive LGBTQ+ group in Plymouth. We both graduated from Plymouth College of Art, where Salina studied BA Games Design and Claire studied BA Animation. In 2018, we created an Augmented Reality app to bring to life a painted mural at our youth centre at Frederick Street. This project was the genesis of our company Igneous Interactive, developed with support from AYCH.

Igneous Interactive is an immersive and interactive arts and tech start-up company that aims to improve people's lives through creative technology as well as creating original Art Pieces with a unique technological twist. We do Virtual Reality projects and Augmented Reality projects. An example of a Virtual Reality project is a workshop on mental health and well-being for the SHIFT project (see below), where we helped young people using Virtual Reality equipment with sculpting software as a means to express themselves. The other side of our work is the Augmented Reality projects in which we make pieces where we can overlay a digital animation in the real world and you can see it by using your phone or any smart device with a camera. It's like bringing life to static still art pieces.

At the very beginning of Igneous Interactive we carried out a 8 months-long AYCH internship with Fotonow, a Community Interest Company (CIC) based in Plymouth who work on the impetus of "Visual Culture for Social Change". During this internship we worked on an immersive Virtual Reality and Mental Wellbeing project "SHIFT...Between ourselves", funded by AYCH and The National Lottery Community Fund. Apart from participating in different projects and VR events, during our AYCH internship at Fotonow we were mentored on how to get our business started, how to price things and how to do networking.

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Salina Rawles and Claire Higgins from Igneous Interactive,
Plymouth City Council Youth Service, Plymouth (UK), 2019.

Without AYCH we don't think we would be where we are now. Most of the work we have picked up as a business has been through the network we have built up through Fotonow and AYCH. Having that support to get us started has been really helpful and useful to us. Before our first mural project, we hadn't even considered starting a business in digital arts. All the help with AYCH to get us up and running as a company has shown us two very important things: digital arts and immersive media can actually benefit people from a well-being standpoint and secondly, it can be a viable business. Although trying to sell ourselves is still challenging, through AYCH with our mentors we figured out the best approach to do it. Rather than pushing our business and saying we can do this and this, we share our vision and ideas around a particular project focusing more on the immersive experience we would like to create.

As part of AYCH, we also took part at the Transnational Creative Jam in Gijón as participants. Since then, both of us have delivered workshops at Local Creative Jams as specialists in Virtual Reality where we have helped young participants to make and set up their own Virtual Reality environments. For Salina, facilitating workshops as an expert is something she didn't anticipate doing before AYCH. Being able to teach young people new things is something she definitely enjoys doing. This is why in the future we would love to take on interns, work with young people and young graduates.

More recently, we have started to work with other businesses, cultural organisations, schools, youth groups and communities. And we deliver partnership projects within Plymouth, Devon and Cornwall, with hopes to expand further -within and beyond the UK. Something we still want to do through our business going forward is community involved projects. Claire now has a youth-work support role within Plymouth City Council's Youth Service. Igneous Interactive is already approaching 2 years and we are doing pretty well for a start-up despite the Coronavirus lockdown. We have reached the point where we have purchased all our equipment and we think that we can start making profit. Our immediate goal is to be able to make Igneous Interactive our full-time job.

A.3 Activity in focus: AYCH Ocean, Vida Láctea, Lugo (Spain)

The AYCH Ocean project focused on environmental prototyping and aims to protect the Atlantic Ocean from the growing invasion of plastic waste. The idea for AYCH Ocean originated in the Atlantic Brainstorming International event held in Lugo in April 2018, where emphasis was placed on the plastic waste issue in the Atlantic Ocean. The AYCH Ocean project had two main target groups: young people between18 and 30 years old to carry out a project in the National Park of the Atlantic Islands of Galicia in the Cies Volunteer Camp, and younger people to carry out specific tasks on the beaches of Gijón through the involvement of the Gijón City Council with schools in their area. Space, our AYCH partner in Exmouth was also interested in replicating the methodology but it wasn't possible due to the Coronavirus lockdown. In addition, several associations in Plymouth and Cork (Ireland) were interested in becoming involved. Other young people from L'École de design Nantes Atlantique and Plymouth College of Art undertook international residencies as part of AYCH Ocean. In 2020, due to Coronavirus, the activity was limited to 30 young people from Galicia.

Each participating partner in AYCH Oceans was able to organise a series of activities around the protection of the oceans through the involvement of young people. Collaboration with local partners is key to give local visibility as well as influencing activities carried out on site. The AYCH Ocean methodology, used for the projects, aims at putting in place a practical strategy through active intervention programmes where young participants are key actors. AYCH offers prototyping, training and creative tools to the participants to develop solutions through new technologies and boost young people's skills to undertake business opportunities. Moreover, young participants' hands-on engagement with the marine environment where they develop awareness of and a different view on their environment. AYCH Oceans aims to apply and spread the principles of sustainability and circular economy that underlie plastic waste eradication.

In 2019, a two-month transnational event brought young people together at the Cies Volunteer Camp. A total of 120 young people, from all over Europe, and 8 mentors and entrepreneurship professionals participated. The Xunta de Galicia established rotations of groups of 30 participants who changed every 15 days. The central theme of the activity was "Plastic-Free". The event consisted of the following main actions: training and prototyping solutions, collecting and classifying

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Young people attending the AYCH Ocean Programme complying with Coronavirus regulations. Cies Island (Spain), July 2020.

marine litter and raising visitor awareness. The participants lived at the National Park and carried out a study that included the collection, classification and assessment of plastic waste in the park. The study was summarised in a report endorsed by the National Park.

AYCH Ocean shows the importance of collaborative efforts between AYCH partners and local stakeholders. Furthermore, it confirms how critical it is for AYCH partners to bring their know-how together for providing young participants with a rich, creative and innovative learning experience. This project is a good opportunity to test non-formal experiential learning approaches to social entrepreneurship as well as developing specific AYCH creative tools. AYCH Ocean is founded on first-hand experience with marine waste: participants can see, feel, touch and directly act on this issue through quick prototyping of their ideas. This is in line with the AYCH values of experimentation, empathy and creating value for others without space and resource limitations.

The AYCH Ocean experience showed many participants new ways of being advocates for the environment, looking after it and engaging other people in the process. AYCH Ocean is a clear example of bringing a new and refreshing methodology to an existing environmental activity, which needs new ways of engaging young people from all over Europe.

B. Key Enabling Technologies

One of the central aspects of the AYCH project is what we have identified as Key Enabling Technologies (KET). These KETs are a group of technologies that have a wide range of product applications such as developing low carbon energy technologies, improving energy and resource efficiency, and creating new medical products. They have great potential to fuel skills that expose young people to emerging economic opportunities, jobs and ultimately economic growth.[34]

Within the AYCH project and through the different cornerstone approaches: Transnational Creative Jams, Local Creative Jams, Idea Incubation Programme and the International Residencies; the young participants have the possibility to learn by practising the following KETs:

- Additive manufacturing: 3D printing
- Subtractive manufacturing: milling, laser cutting, vinyl cutting
- Coding and programming
- App and Web development
- Immersive technologies: Virtual Reality and Augmented Reality
- Internet of Things (IoT)
- Website management
- Digital design
- Drone tech

Within the AYCH network of hubs, these technologies and the possibilities to experiment with them have become accessible to young people in unexpected places. In the case of Pacificstream in Liverpool (UK) and Vida Láctea in Lugo (Spain), the creation of their Fab Labs spaces and communities was possible thanks to AYCH. At present, the Fab Labs Platform in Liverpool and the Lug Open Factory in Lugo are up and running to welcome project and idea holders.

All our participants have equal access to material, technical and knowledge resources that are otherwise often inaccessible within their local context. Across our partners' hubs and during the

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[34] *Xosé L. Garza, Questions: Oliver Raud, November 11, 2018. https://www.aych.eu/questions-oliver-raud/ (accessed July 3, 2020).*

duration of the project, we aim at opening the access to these technologies under fundamental principles:

- No judgement
- Excitement and fun
- Sharing
- No cost
- Unlimited

The AYCH learning environments at the hubs and during the Creative Jams are shaped and marked by the use of KETs. When young participants use, experiment and test these technologies, learning spaces become alive. It is common to see the movement in the rooms, hear the exchanges among participants, their laughter and the noise of working machines. The power of these technologies not only lies in their capacity to enable young participants to formalise, shape and make their ideas function, they also become the focus of collaborative interactions among young participants and specialists. Young participants learn from each other and build connections in a dynamic and energising environment whilst having fun and being exposed to other standpoints. It is through these constant and dynamic interactions that the exchange of ideas and the emergence of new ones happens.

From the moment in which young participants are introduced to a KET, they are enabled to *make*. *Making* refers to a "class of activities focused on designing, building, modifying, and/or repurposing material objects, for playful or useful ends, oriented toward making a "product" of some sort that can be used, interacted with, or demonstrated".[35] At the heart of making as a learning approach there is the notion of "taking an idea and constructing it into some physical or digital form".[36] Making has the potential to engage young people in creative and meaningful ways of approaching and understanding social issues. Making and makerspaces are considered to have a democratising power as they provide access to digital fabrication, shared softwares and design. More importantly, they make available technology and skills that were only available to experts.[37] As stated by Mark Hatch "The real power of this revolution is its democratizing effects. Now, almost anyone can innovate. Now almost anyone can make. Now, with the tools available at a makerspace, anyone

[35] Martin Lee, "The Promise of the Maker Movement for Education," Journal of Pre-College Engineering Education Research 5, no. 1, (2015). https://doi.org/10.7771/2157-9288.1099

[36] Kimberly M. Sheridan, Erica Rosenfeld Halverson, Breanne K. Litts, Lisa Brahms, Lynette Jacobs-Priebe, and Trevor Owens, "Learning in the Making: A Comparative Case Study of Three Makerspaces." Harvard Educational Review 84, no. 4 (2014): 505-531.

[37] Erica Rosendfeld Halverson and Kimberly M. Sheridan, "The maker movement in education," Harvard Educational Review 84, no. 4 (2014): 495-504; Shirin Vossoughi and Bronwyn Bevan, Making and Tinkering: A Review of the Literature (Committee on Successful Out-of-School STEM Learning, 2014).

can change the world".[38]

Making is not just an activity but a learning approach and a movement. Within the making movement, it is often stated that communities are created and built up around technologies. Technologies bring people together for different reasons: because individuals share their interest in creating solutions to meet tangible needs, because they share a particular interest in the technology itself or because they are interested in cultivating their connection with a broader network of makers.[39] In AYCH, we have observed that apart from creating a sense of community among the participants, the making experience with KET also affects the young participant self-perception. Making something oneself is a means of self-extension since the result represents the time, effort, attention, values and choices of its maker.[40] Bringing your own idea to life shows that you can do it no matter what your background and life-path is. The making experience is an opportunity to gain confidence in your creative capacity and feel empowered to keep experimenting.

[38] Mark Hatch, The maker movement manifesto. Rules for innovation in the new world of crafter, hackers and tinkerers (New York: McGraw-Hill Education, 2014),24.

[39] Russell E. Browder, Howard Aldrich, and Steven Walter Bradley, Entrepreneurship research, makers and the maker movement (Working paper, 2017).

[40] Sukriye Sinem Atakan, Richard P. Bagozzi, and Carolyn Yoon, "Make it your own: How process valence and self-construal affect evaluation of self-made products," Psychology and Marketing 31, no. 6 (2014): 451-468.
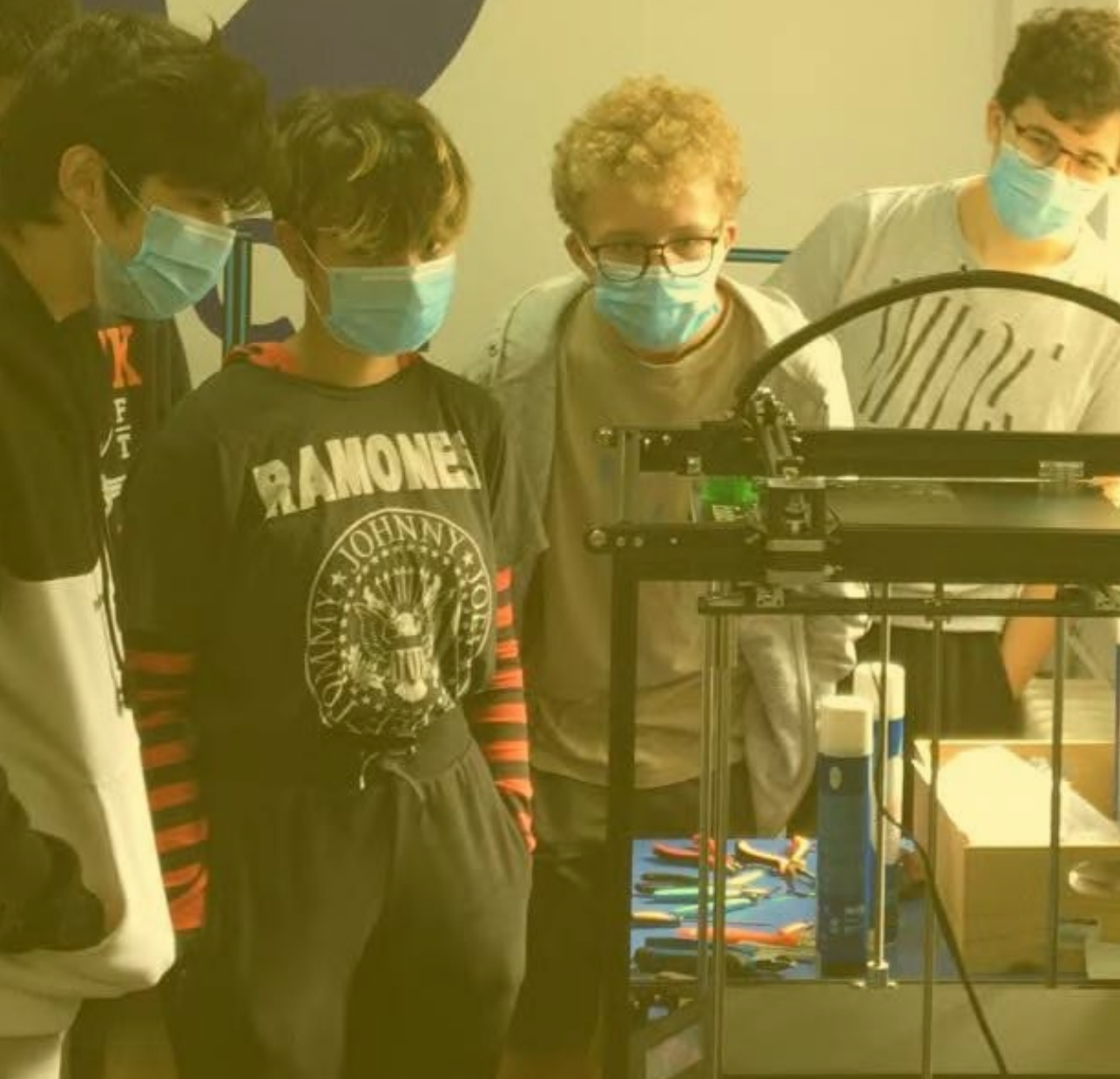
B.1 Activity in focus: Lug Open Factory, Vida Láctea, Lugo (Spain)

Lug Open Factory (LOF) is the name given to the Fab Lab of Vida Láctea, SLU within the Atlantic Youth Creative Hubs Project. These are modern facilities housed in the Lug 2 Youth Hostel in the city of Lugo, where young people from the Comunidad Autónoma de Galicia can access training and new technologies.

Lug Open Factory is a clear example of taking advantage of a youth hostel, and rethinking it by making it revolve around technology, innovation and prototyping. LOF has a free co-working space where 12 youth companies from Lugo have found a community work space to create synergies and common projects; young people meet regularly for coffee sessions during which they design and create. The profile of young co-working entrepreneurs is related to new technologies and creativity. Another important space is the Fab Lab that houses innovation activities and different spaces for graphic design, 3D design, laser cutting, sublimated t-shirts on a hot table and vinyl, an audiovisual classroom and a postcard studio.

The main objectives of LOF are the constant development of young people through training, introducing Design Thinking activities and the use of new technologies such as 3D printing, laser cutting, audiovisual creation, creation of garments or podcasts. The centre has an incubation room equipped with the latest technology, a co-working space and a meeting room. The centre organises its own activities or in coordination with other public and private institutions. We focus on Design Thinking, sustainability, use of new technologies and social prototyping. We ask newly created companies and entrepreneurs to include in their objectives that the enterprise will benefit society.

Another key element of the LOF approach is the diversity of local stakeholders with which it engages. For example, we created the Local Collaborative Network (RE.CO.LO.CA) that links local partners with the AYCH project. This has allowed us to create a supralocal dimension for young people and thus reach other spaces with greater influence. An example of this would be our collaboration with Asociación Movilidad Humana, a non-governmental organization through which we contact young immigrants to develop prototypes with them.

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Young people at AychTech Camp at the Lug Open Factory.
Lugo (Spain), 2020.

Through AYCH we have learned that the most important aspect to consider in the Fab Lab is the engagement of young people. It is necessary to provide them with the tools they may need in an increasingly changing society and labour market; without forgetting that it is crucial to listen to them to meet their needs as accurately as possible, adapting the training to them. The most important tool today for the young entrepreneur is to have free open spaces to give them opportunities to develop their project with Key Enabling Technologies and share similar experiences and feel the encouragement of their peers.

The next steps of the Fab Lab will be mainly to increase the number of young people that participate in our activities and continue our collaboration with local secondary and high education institutions. We will also try to make AYCH present in other European projects because we consider this model to be very viable and low cost. Non-formal education is a pending issue in Europe and we believe that spaces like LOF are ideal for transforming youth society. The future is to connect to young university students and with young people whose life has not given them the opportunity of a higher education.

B.2 Participant in focus: Vincent Chevalier, Grand Angoulême (France)

I am a 29-year-old Webdesigner, Community Manager and AYCH Ambassador. I participated in AYCH local workshops, the local incubation programme in Angoulême and I did a residency at Plymouth College of Art (PCA). The project I developed as part of AYCH is an application called «Svenja» that collates all events and information concerning cinema: film premieres, special evenings, critics, etc.

During the full month incubation programme in Angoulême I learned how to make my idea grow, how to go deeper into the details of my project and how to better manage my time. I had some ideas but didn't know which one would be the best fit for my project. The incubation project helped me by bouncing ideas and focusing my attention on what was missing in order to move my project forward. I also got support in developing the most challenging aspect of the project: creating a business model. Before the incubation programme I had struggled with it for 4 or 5 months. During the incubation programme I realised that it wasn't all that complicated and managed to come up with a functional system. In Angoulême I also had the chance to do a variety of workshops on Sound Design, video and 3D modelling.

Afterwards, I did a super intense week-long residency at Plymouth College of Art (PCA) where I met different specialists and learned a variety of skills such as video shooting, video editing on green background and special effects. I was with 3 other participants and we did everything: setting the projectors, shooting, animating and editing, it was really cool. Now, I feel like I know the basics and that I can use this technology whenever I need it in future projects. The residency in Plymouth was also useful in developing a network outside of my own cinema network. For instance, I presented my project to the PCA's independent cinema. I learned how to pitch my project in English which was great fun. All the experience was challenging, but interestingly, nowadays, I feel more comfortable explaining my project in English than in my mother tongue, French. Pitching my project has served my business idea well as I was able to canvas cinemas in England, the USA, Germany and Italy.

As an AYCH Ambassador, I have kept in touch with other young ambassadors from Plymouth, Angoulême and Brest. The sessions with the ambassadors have been very useful as within them we

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Vincent Chevalier during the International Residency at Plymouth College of Art. Plymouth (UK), February, 2020.

share fields of interest and business. Within these ambassadors' sessions, we reflect and exchange ideas on current issues; for instance, how we foresee the future affected by the Coronavirus. The whole AYCH experience brought me peace of mind. When the ideas around my project started to come up I had a lot of stress, I was very anxious, I was afraid of not being able to develop my idea and miss out on the opportunity. Being with a lot of people who were going through the same experience and to see the great variety of projects meant that the stress reduced. What I like the most about my AYCH experience is that I got to know people that despite coming from very different cultures and backgrounds, share similar ways of doing and being. It's a group of people who work to achieve something together where each one contributes.

Currently things are going slowly for my project due to the Coronavirus. Part of the work now is to digest what this crisis means for the Svenja project and myself. All the contents for the application are done and I am learning a lot about coding as I work on coding an application on my own. Recently I have been thinking of opening my own Web Design and community management company and started identifying potential clients in Angoulême.

Pitching
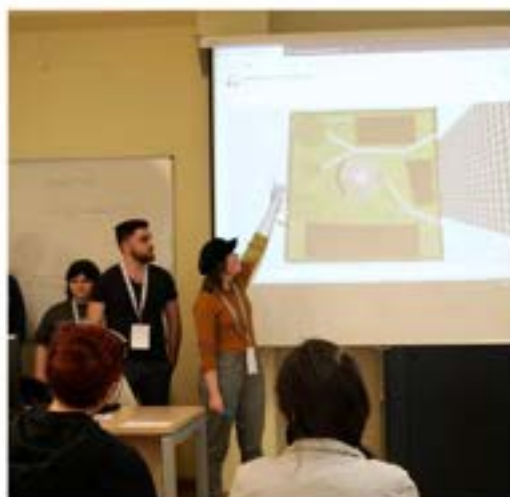
Young people pitching during Creative Jams 2017-2020. *Sarah Packer, Plymouth College of Art.

C. The online learning environment: opportunities in a crisis

In the context of the Coronavirus pandemic crisis that started in March 2020 and imposed social distancing practices worldwide, the AYCH partners had to look at ways of adapting and delivering all the activities, events and programmes that were supposed to take place in a face-to-face mode. How is it possible to keep implementing an experiential approach to learning social entrepreneurship skills remotely and mainly through online communication?

The Coronavirus pandemic lockdown was a significant challenge for the AYCH project and its partners. Yet, it also gave us ample opportunities as it prompted us to think alternatively about how to carry on our cornerstone activities. Distance learning allowed us to improve and optimise certain aspects of the project that we could not have realised without having to confront the Coronavirus pandemic contingency. Although AYCH partners share a series of values and specific outcomes, each partner put in place context-specific tools and methods suitable for the nature of the activities and the young people with whom they worked. Here, we explain in more detail how the cornerstone AYCH approaches were shaped to respond to the reality of the Coronavirus pandemic lockdown:

AMBASSADORS

The global Coronavirus pandemic pushed us to design an online support programme for the AYCH Ambassadors. At a time of social distancing, we all felt it was crucial to keep our community of transnational creatives and social entrepreneurs connected. We decided to launch ambassador meet-ups online every two to three weeks, tens of ambassadors would join these meet-ups where the transnational atmosphere and camaraderie was truly uplifting.

We decided to divide the community into three different groups that would focus on different aspects of their role as AYCH Ambassadors:

AYCH Talent: a group that helps young participants to develop their professional life, it's about sharing experience and promoting their own talent but also getting business advice, growing their network, and learning key skills with enterprise workshops and tools.

AYCH Engage: preparing AYCH transnational capitalisation and delivery events together with ambassadors and promoting their work (in social media and physically in the events).

AYCH Vision: giving ambassadors agency to design a better global future and contribute to the AYCH forward-facing approach.

ONLINE IDEA INCUBATION

In order to deliver the programme online we had to adapt it at many levels:

We reviewed the duration of each workshop as the participants and specialists' attention lapses are usually shorter online. We agreed to an hour weekly session, including group discussion time and feedback.

To keep the group connected through this challenging time, we started channels on online communication tools like Discord and Slack (e.g. "Caring is Sharing") where each participant can share their progress during the lockdown, and share information about Crowdfunding campaigns, YouTube channels, Instagram pages or just about interesting initiatives and ideas. This encouraged participants to keep in touch but also better understand each other's business and projects and to collaborate more with one another.

The online workshops were recorded and shared with all participants together with slides and learning resources; this made it easier when someone couldn't attend a session but wanted to catch-up.

A key final element of the programme together with mentoring was the pitching. Each participant introduced their business plan in the most captivating way possible, this was also done online and the session was interactive, with the audience using comments to encourage and give feedback to the aspiring entrepreneurs.

Finally, the mentoring was carried out online using Zoom, GoogleMeet or over the phone and our enterprise advisors supported participants individually, reviewing business model strategy, looking at funding and/or collaboration opportunities, networks, etc.

ONLINE CREATIVE JAM

In April 2020 an Online Creative Jam brought together students from the City Design Lab from L'École de design and the Michel Serres Center. As for previous Creative Jams, the tool AYCH Futures Cities was used in order to encourage the participants to question and imagine alternative futures for their cities. The purpose of the Creative Jam was slightly modified from its original format which usually produces working prototypes in 3 days. During the Coronavirus lockdown, the idea was to change the format to open-up creative avenues and produce image-based prototypes instead of functional prototypes. The lack of work on functional prototypes made it harder for the participants to transition from very imaginative and broad scenarios into shaping more concrete ideas.

During these experiences we realised the importance of online platforms that quickly became essential creative and collaborative distance working tools:

- Miro, an interactive collaborative online board
- Slack & Discord, online team communication tools
- Zoom & Hangouts, video conferencing platforms

Thanks to these online platforms and through our distance learning approach, we could combine a variety of AYCH resources at one time; more than we were able to do in a traditional face-to-face mode.

Interdisciplinary exchanges and the crossing of different transnational perspectives was facilitated by this modality. Overall, we observed that the use of distance learning during the context of Coronavirus lockdown facilitated the inclusion of a broader scope of participants, either young people, partners and specialists, as geographical constraints were overcome.

As the organisation of the meet-ups was easier, we could meet more frequently and iteration in the different processes was also easier. Also, the possibility of recording the meet-ups contributed to having a reflective view on the different activities and tools, which allowed the identification of further actions.

On the other hand, in a distance learning mode, we realised that certain tasks took much longer. A very deep preparation phase was essential where tools, timing and the facilitator's intervention were even more precisely defined. The time allocated to specific tasks for the young participants would almost double in comparison to a face-to-face learning setting.

At a larger scale and in line with the AYCH project willingness of working within and for complex societal and environmental issues, the Coronavirus lockdown and distance learning has given us the opportunity to reflect on the possibility to reduce the project's carbon footprint and be more inclusive of participants and partners that could not move geographically.

We also realised that we lost some of the benefits of real-life contact and social exchange:

The spontaneity and the adaptability that can only happen through quick informal exchanges among participants. In this sense, during the AYCH distance learning activities we encouraged the formation of small working groups where informal exchanges are more likely to take place.

The capacity to minimise language barriers. Making and prototyping has been a very relevant aspect of AYCH since it allows people that don't speak each other's language or don't feel at ease to express themselves through words, express their ideas, opinions and previous experiences more effectively. In distance learning, it is harder to bring together participants around the collaborative making of tangible prototypes. In order to overcome this difficulty, we have encouraged the use of quick prototypes that can be done remotely and collaboratively such as sketches, storyboards, posters and videos; but these cannot replace the experience and feeling of sharing as you make something with people in the same room. In addition, the difficulties to communicate online were amplified by the fact that body language and micro-expressions are harder to get through the screen especially where face coverings are needed.

mission

The purpose of AYCH Talent is to offer businesses and organisations access to young creatives who can help support the development of their business for a flexible period of time across the Atlantic Area of France, Portugal, Spain and UK.

we're different

AYCH Talent provides businesses with bright, creative talent. Our young people are idea generators, designers and design thinkers, futurists, tech lovers, creatives, innovators, and above all are committed to shape a sustainable world. The flexible terms of the programme - flexible on a daily or weekly basis for a period of 2 weeks or more - provides businesses and interns with the ability to shape a relationship that is mutually beneficial and needs driven.

"We are partnershi goal of suppor young

This project is co-financed by the European Regional Development Fund through the Interreg Atlantic Area Program.

C.1 Activity in focus:

Training the Trainers, Plymouth College of Art (UK), Space (UK) & Vida Láctea (Spain)

Training the Trainers (TTT) was a training session organised by the AYCH partner Plymouth College of Art and delivered by Plymouth College of Art (UK), Space (UK) and Vida Láctea (Spain). The programme shared best practices, methods and tools with practitioners from other institutions and projects working in the field of social entrepreneurship. The first session took place during the Coronavirus lockdown and involved IN SITU, a Central European INTERREG project that targets long-term unemployed people - young and old. As both AYCH and IN SITU focus on social entrepreneurship, we decided to collaborate and share best practices. We started working on a Training the Trainers session for the IN SITU partners and specialists that was delivered by the AYCH partners and specialists. The session, which involved 12 partners from 6 different countries, received very positive feedback and follow-up sessions were requested.

The training focused on social entrepreneurship; aiming to share experiences, tools and expertise in designing, implementing and managing activities around social entrepreneurship in the UK, France, Spain and Portugal as part of the AYCH project. It did so by bringing to the fore the knowledge and experiences of all participants and by following an experimental approach. Each of the collaborating partners brought a specific area of expertise. Plymouth College of Art for example, focused on questions such as: How to promote social entrepreneurship and gain interest from artists, creatives and unemployed people that are not particularly career-oriented or don't have the confidence or skills to create a lot of visibility? Space contributed expertise on how social entrepreneurship can be introduced to disadvantaged and disenfranchised young people, as well as tools of evaluation and transnational coordination. Vida Láctea, contributed with knowledge on how to boost entrepreneurship in a rural world.

Although the IN SITU project focused on social entrepreneurship in a multigenerational setting, we found that they faced the same challenges about how to get individuals from various backgrounds interested in social entrepreneurship. The feedback from the TTT session was very positive and this indicated to us that the AYCH approach is also suitable for older generations. It also increases transgenerational collaboration in times of social isolation. The IN SITU partners have asked for a follow-up session where they can be taken through the AYCH tools, in order to implement some of our AYCH methodology in their practice (Idea Incubation Programme, Creative Jam, etc), and a long-term outcome would be for them to adopt the AYCH model in their locality to boost social entrepreneurship.

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Pip Raud Photography. AYCH Quest tool and communication tools.

C.2 Participant in focus: Patrícia Costa Fabriz, Atlantic Cities, Rennes (France)

I am from Brazil and in September 2019, I started a master's degree in International Development, in France. In May 2020 I started a fully online internship at Atlantic Cities during the Coronavirus lockdown. I worked as a Project Assistant for AYCH project, in the framework of Atlantic Futures (AF) programme.

During my internship I participated in diverse activities, mainly associated with AYCH project capitalisation and daily project management. I took part in online meetings with other partners where I experienced first-hand how cooperation projects are handled. In particular, I would like to highlight my contribution to the AYCH Capitalisation Newsletter, which was delivered every month to AYCH partners and directed at young people to provide them with information on European opportunities. Also, I had the opportunity to help arrange the Atlantic Cities initiative AYCH Kids which was aimed at promoting AYCH values such as creativity, innovation and sustainable future to a younger age group. And finally, I had the opportunity to take part in online activities such as the AYCH Bright Future Online Jam and in a variety of webinars.

As I started my internship during the pandemic induced lockdown, I had to adapt to working online. Understanding the working environment culture and integrating myself to the team from afar was the first challenge. Working at distance can be challenging and requires flexibility and special attention in avoiding misunderstandings. But with a collaborative and supportive team it was possible for me to evolve and improve the much-needed skills for a professional future in an increasingly online working world.

It was very exciting and valuable to be part of an international and multilingual environment. During my internship, I was given a "real job-world" immersion experience that allowed me to obtain the required skills to reach the job market after my studies. But I also had non-formal training at the beginning of my internship which showed me how EU policies and EU cooperation projects work in practice. I will now continue with my studies, so that I can contribute towards a more coherent social development in terms of European territorial cooperation. Professionally, I would like to continue to engage in innovative and transformative projects such as Atlantic Futures and AYCH which place young people as protagonists of their own futures.

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Patrícia Costa Fabriz home working. France, 2020.
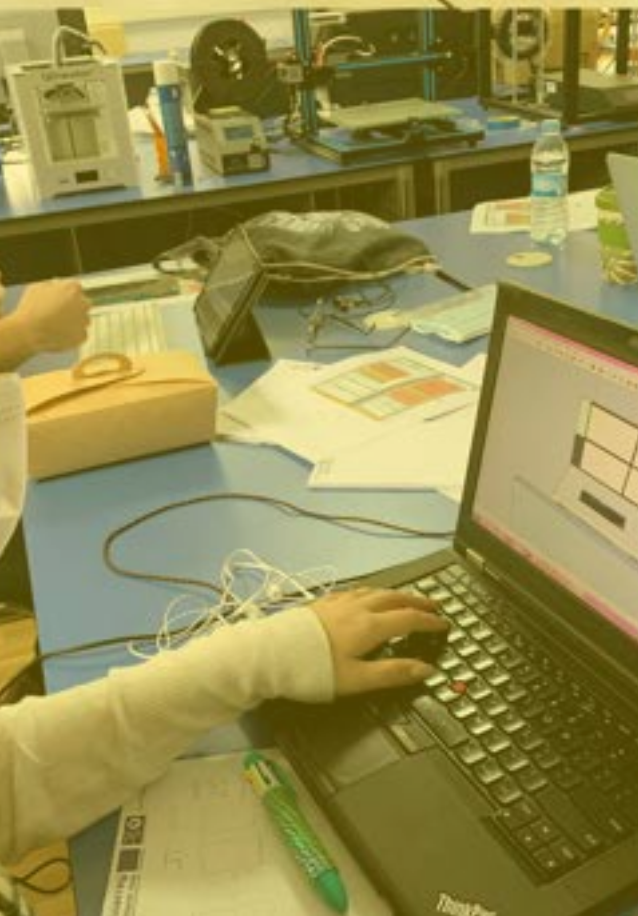
C.3 Activity in focus: Online Transnational Creative Jam, Câmara Municipal de Santo Tirso (Portugal)

The Online Santo Tirso Transnational Creative Jam brought more than 130 people together including 50 young people from 8 hubs divided into 9 groups, 10 mentors, 2 facilitators, 4 "flying mentors" (students from L'École de design Nantes Atlantique who assisted the teams), organisers and spectators. This was possible due to the network built by the partners to mobilise young people in only one month after previous plans had to be re-made. The choice of the theme "reinventing the future" in a pandemic context was made to cover topics such as improving healthcare, redefining work and education, increasing rurality and sustainability, fostering digital cultures, pioneering refashion, building imaginative communities.

The host Hub of the event was Fábrica de Santo Thyrso, originally created in 1898, the historic factory once employed over a thousand people. After its demise, in the 1990's, it became part of the Municipality and began its urban transformation process. Nowadays, the hub has become a modern and attractive creative space with an important role in the fashion, cultural and creative industries, making crucial contributions to facilitate young entrepreneurship.

Although this Creative Jam had the particularity of being online, many of the lessons learned from the Gijón Transnational Creative Jam were useful in continuing our activity. It was important for the young participants to work closely with the mentors (each team had a mentor to work with them throughout the event supplemented by flying mentors from L'École de design). The event was structured around the 3 Creative Jam's phases: Explore, Discover & Learn and Solve & Create. The Bright Future serious game was retained to launch creativity (Explore phase), followed by a series of workshops (see diagram below) to work on deliverables (Discover & Learn phase), and the one-day hackathon (Create phase). Normally, Transnational Creative Jams would extend over 3 days but 3 full days of online work was considered too long, therefore we reduced and condensed the whole event into 2 days. The collaborative applications Miro and Slack, as well as the video conferencing application Zoom, were used to make as many connection-points as possible, to facilitate exchanges and creativity.

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Different Hubs participating in the Santo Tirso Transnational Creative Jam. From left to right: Santo Tirso, Nantes, Lugo and the Cockpit tool on Miro. Online, December, 2020.

SANTO TIRSO TRANSNATIONA
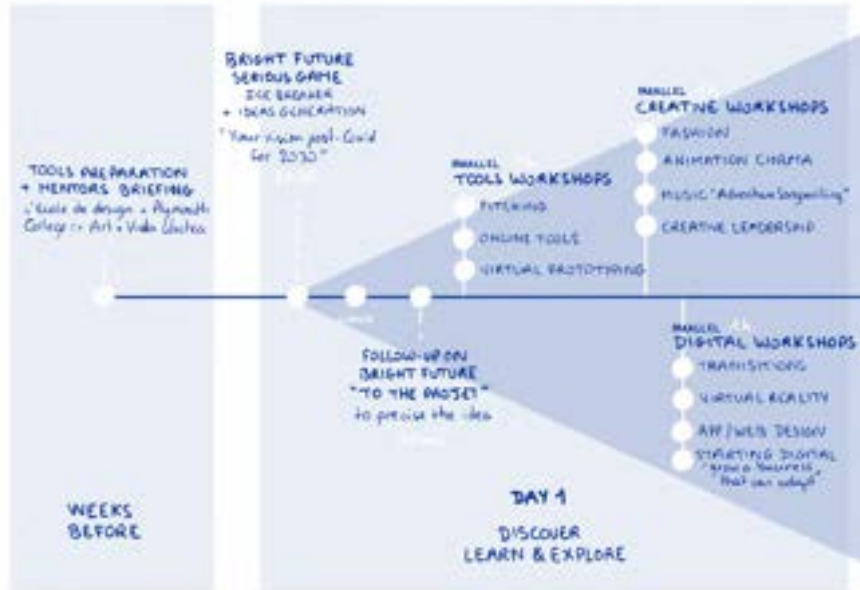
The creativity and design tools used were simplified and centralised on the Miro platform in the form of a "cockpit". The Bright Future serious game underwent numerous tests upstream, adapting it for online interactive use. This tool was also used to generate initial ideas for the hackathon day by adding a "rocket section" to bring ideas into a real context. Similarly, the hackathon was redesigned. Sequences were developed over half days: ideation in the morning, prototyping in the afternoon, augmented with the possibility of reserving slots with specific experts online. In particular, there was a prototyping team of experts available from the Porto Global Hubs, a stakeholder of Santo Tirso Municipality in the AYCH Project. The "cockpit" made it possible to group and provide simple tools that can be more easily handled and create an immersive universe. We also retained the principle of setting up teams by hubs rather than transnational teams, with some teams being able to be physically present on their premises and to minimise language difficulties in an already demanding online environment.

Notably, the co-animation of the event shared the workload. The Municipality of Santo Tirso (through the specialist team of TAIKAI) organised the event and continuity and L'École de design managed the implementation of the collaborative creative tools. Despite extensive technical preparation of the management of the Zoom video, during the first morning, there were some technical glitches solved by collaborative troubleshooting, once these were resolved everything went well. The combination of Slack and Zoom was particularly successful.

L CREATIVE JAM PROCESS

HACKATHON
From an idea to a prototype
following the "cockpit" tool

Full day

Teams on:
ZOOM
MIRO
SLACK
+ MENTOR SUPPORT

LIVE
PITCH
3 minutes

DEFINITION
OF THE IDEA

PROTOTYPING

European jury
deliberation
& feedback

Possibility for teams
to incubate their project
within the AYCH programs

+ Creative Experience to live

+ Ambassadors program

DAY 2

CREATE

ONLINE
FOLLOW-UP

 Once again, the Creative Jam was a great catalyst for exchanges and positive experiences. We know now that it is possible to run large-scale transnational events online, even if they do not have the intense richness of physical meetings. The experience has allowed us to share a lot of know-how related to the implementation of these events. The contribution of the TAIKAI teams contracted by Santo Tirso was most significant in this field bringing continuity throughout the event (presenter, livestream, music...), and the exchanges between partners in the preparation led to the creation of efficient tools that can be adopted by all. In fact the very next day the same tools and mentoring approach was successfully used at a Local Creative Jam by Vida Láctea, our partner in Lugo. This combination ultimately resulted in good quality projects, acknowledged by the juries and hopefully a source of ideas for future developments. The quality of the projects and the choice of prizes (creative experiences) gives hope for future developments, especially for the winning projects of Santo Tirso.

More than anything else, in a particularly difficult and exhausting context, the total success of this event demonstrated the resilience of the partners and young people, capable of responding positively, with the AYCH's already developed tools, to the unprecedented challenges of a context shaken by the global pandemic.

WORKING IN MULTICULTURAL LEARNING ENVIRONMENTS

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Young people attending a Tate Gallery Creative Jam, London (UK), 2019.

A. Diversity as a lever for innovation

AYCH brings together young people, partners and specialists from different cultural backgrounds and paths in life to create impactful things together. No matter your experience, age, your previous training, your area of expertise, where you come from, your language, your skills, whether you consider yourself a creative person or not; you are welcome to experiment, share and create in safe learning environments. We see this diversity as a lever of innovation and creativity.[41]

Diversity is challenging to young participants and to partners since it confronts us with very different ways of thinking, doing and feeling. In the face of diversity, the complexity of societal issues is also revealed to us. Diversity enhances creativity as it fosters our capacity to take into consideration, combine and keep in tension multiple perspectives and viewpoints when looking for solutions.[42]

Being part of the AYCH project as a young participant or as a partner is synonymous with having a transnational experience. The crossing of very different perspectives, practices, cultural backgrounds, paths in life and even language differences, is a lever for creativity and innovation as they push all participants out of their comfort zone.

With the purpose of providing this transnational experience to our young participants and to our partners, in AYCH we have put in place different approaches:

International Residencies: AYCH participants travel to another country to join a Hub for an immersive 5-day visit. The choice of the destination hub is based on the local knowledge and expertise relevant to the subject the participant is working on.

Training the Trainers: A training session around the creative approach to social entrepreneurship organised by AYCH partners. It aims at sharing best practices, methods and tools with other institutions and projects working in the field of social entrepreneurship.

Transnational Creative Jams: An immersive transnational three day long creative event that

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[41] Giovanni Innella and Paul A. Rodgers, "Making Sense: Harnessing Communication through Prototyping," *The Design Journal*, 20 (2017): S1154-S1166

[42] Tendayi Viki "Why Diverse Teams Are More Creative," *Forbes, December 6, 2016.*

brings together partners and participants from across 4 countries and 13 cities of the Atlantic Arc.

In addition to these approaches, AYCH has had the support of the Interreg Volunteer Youth (IVY) programme. For instance, in the case of Vida Láctea (Spain) this partner has benefitted from professionals in communication and economic law from outside of the Atlantic Area. IVY volunteers in AYCH operate at two levels:

Project management: taking part in meetings with the partners (steering committees) so that the volunteers know how high-level negotiations unfold. Contributing towards the development and organisation of events. As with any partner, they develop new skills along with the rest of the project partners.

Young participants' follow-up: getting involved in the direct management of some aspects of the incubatees and their development programmes. Being in direct contact with the young participants, helping them and accompanying them in their idea and business development process. Their presence and participation is very important as young participants are very receptive to and reassured by working alongside young volunteers.

The aim for this volunteer programme within AYCH is to allow the volunteer to learn new skills, or develop their existing skills as they use them directly with AYCH's young participants. This opens up professional opportunities for the volunteers. For instance, volunteers who have been part of AYCH team now occupy significant positions, for example Luc François, attaché for universities at the French Embassy in South Korea, where his AYCH path was valued very positively.

IMPLICATIONS FOR YOUNG PARTICIPANTS AND PARTNERS

For all the AYCH young participants, immersion in foreign environments compels them to share, negotiate and empathise with the other participants.[43] As they explore these new environments and compare them to their own reality, they often develop a different understanding of the subjects and issues for which they wish to work and develop solutions. Their interests and ideas, although personal and conceived for themselves, can take a more international dimension and be enriched as they are shared with other participants.

Transnational experiences within AYCH are also an opportunity for building up an international

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[43] *Nicola Middlemiss, "Why schools should embrace transnational learning," The educator higher education edition, December 20, 2017. https://www.theeducatoronline.com/he/archived/why-schools-should-embrace-transnational-learning/245102 (accessed July 8, 2020).*

network of contacts. In the light of a complex and ever-changing world, having transnational experiences fosters the participants' capacity to adapt to these changes and to think of solutions to address them.

For the partners and specialists, the transnational experience that AYCH offers is rich in exchanges around different perspectives on learning, learning practices, methods and tools. It is also an opportunity to test ideas, tools and contents with a very diverse audience. Since these transnational experiences take place in informal, safe and fun environments, the partners can continuously learn from all the other participants.

Our experience as AYCH partners has also shown us that the diversity within our teams (political context, organisational cultures, professional backgrounds and language) has been a lever for innovation within itself. As we reflect on how to accompany participants in their diversity, we need to acknowledge and reflect on our own differences within the AYCH project partners.

A.1 Participant in focus: Lucy Parnell, Space (UK)

I am Lucy, I am 16 years old and from a small village called Sidford. I am in my first year at college studying A level fine art. I attend AYCH at the Hive youth centre in Exmouth Devon. I have travelled outside the UK before to France and Germany for holidays but never to work on projects, that part of AYCH was a totally new experience. The project I am working on is called "Hydroeco" and it is an easy to use travel cup for people with disabilities. I work in a team of 3. We all met and came up with the idea for the cup at the Exmouth Hive Creative Jam and have now been working on the idea for nearly a year. Part of the reason why we chose it is because I'm a disabled person and I understand how difficult it is to do little things that other people take for granted. We thought this would be a great idea to make a change for disabled people and make travel cups more accessible to them. Our hope is basically that disabled people can use the travel cup without having to look like one of those horrible hospital mugs that are made of awful plastic. It's a cool cup that is going to hopefully help a lot of people to have the right drinking cup without having to struggle.

AYCH has been about helping young people to develop ideas and learn how to design a project and getting it working out and actually going through the logistics of it, instead of just having an idea. It allows young people to look more into the real world of entrepreneurship. I have enjoyed being part of AYCH; it has made me feel like I'm part of a team in terms of having my ideas heard and collaborating on things as well as learning to use new things. The technological side was very useful too: learning how to use 3D printers and laser cutters.

AYCH has made me think a lot about logo design and all of that, especially since we have designed the cover for the stand. I do want to be a designer and at least I know that I enjoy doing those kinds of things, so I could work on doing stuff like that in the future. AYCH definitely showed me how hard it is to create good design and be a graphic designer.

It was really good to have loads of groups of people from different countries sharing their ideas. It does enable you to think outside the box a bit more. Although people from different parts of Europe have similarities, they live quite differently. It is interesting to see these differences in people's cultures.

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Lucy Parnell (on the left) and other young participants during the
Exmouth Local Creative Jam, Space. Exmouth (UK) 2019.

A.2 Participant in focus:

Danae Vélez, Vida Láctea, Lugo (Spain) & L'École de design Nantes Atlantique (France)

I am a young woman who was born in México. I have always been fascinated by the connection between people and their environment. I hold a Master in Design in the programme Mutations of the Built Environment at L'École de design Nantes Atlantique in France for the academic year 2017-2019, and a former Interior Designer at the Universidad de Guanajuato in México. Currently, I am working as an Interior Designer at IKEA in México, and as a journalist for the Urban Chronicles platform, contributing to writing online articles about themes of analysis for living in more sustainable and inclusive cities.

My first approach to AYCH started at L'École de design Nantes Atlantique during my courses, while working on a short-term project to create a board game that allows its participants to create futuristic and surreal scenarios. After some time, I joined AYCH's partner Vida Láctea in Lugo as part of my internship. During this time, I had the opportunity to work closer with the young people the project aims to impact, through design and testing Design Thinking tools across the UK, France and Spain, and by facilitating design workshops to help build ideas and projects related to social and environmental issues with local youth in Lugo.

In addition to my main job, I was part of the Cies Volunteer Camp as part of the AYCH Ocean programme, facilitating Design Thinking workshops to develop eco-friendly prototypes to conserve the Cies Islands and create environmental awareness in the volunteers and visitors. My biggest challenge during this experience was to work closely with young people, because the project allowed me to be more in touch with the people I was designing the tools for.

Becoming involved in AYCH allowed me to understand on a professional and personal level, the importance of everyone's participation towards a sustainable planet; everyone involved in the project was inspiring the next generations to be aware of the social and environmental issues and actively create the solutions. I am now an Ambassador for AYCH, encouraging more young people to join us, whilst supporting AYCH to develop future projects. Thanks to my participation in the AYCH project, I feel more engaged in my actions for a sustainable future. Therefore, I'm currently involved in IKEA, inspiring people to live more sustainably in their homes. And as a journalist for Urban Chronicles, I aim to create awareness through my articles. No matter what professional direction I take, there won't be a path that doesn't align with the vision AYCH gave me during my internship at Vida Láctea.

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Danae Vélez facilitating a workshop for Vida Láctea.
Lugo (Spain). May 2019.

B. Prototyping: learning through making and crossing language boundaries

Central to a Design Thinking and experiential approach to innovation, prototyping constituted a key element to the AYCH creative approach and proved to be a very powerful method for bringing to life the participants' ideas and transforming them into concrete actions. Furthermore, prototyping was fundamental for working with teams with diverse skills, cultural and disciplinary backgrounds, different languages and little experience in Design.[44]

A prototype is a draft version of a product, service or space. It allows participants to explore their ideas and show the intention behind it or a specific feature of it. Anything that takes an idea out of people's heads and makes it visible to others may be considered a prototype.[45] "A prototype can be anything that takes a physical form – be it a wall of post-it notes, a role-playing activity, space, an object, an interface, or even a storyboard". One of the main values of prototyping is that it is a generative process: as people prototype, they will generate multiple ideas, which potentially leads to innovation.[46]

A prototype can be quick and rough (called low fidelity) or detailed in their shape and functions (high fidelity). A prototype can be anything from a drawing to a highly functional model of an idea. The AYCH programme favours what has been called "quick and dirty" prototyping which are defined as "creating in a goal-oriented but playful way" without over-investing in time and using readily

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[44] Giovanni Innella and Paul A. Rodgers, "Making Sense: Harnessing Communication through Prototyping," The Design Journal, 20 (2017): S1154-S1166; Klaus-Peter Schulz, Silke Geithner, Christian Woelfel, and Jens Krzywinski, "Toolkit-Based Modelling and Serious Play as Leans to foster creativity in innovation process," Creativity and Innovation Management 24, no. 2 (2015); 323-340.

[45] Kathryn McElroy, Prototyping for Designers. Developing the best digital & physical products (Sebastopol: O'Reilly, 2017).

[46] Todd Zaki Warfel, Prototyping. A practitioner's Guide (New York: Rosenfeld, 2009).

available local resources.[47]

We have seen how learning Key Enabling Technologies through making is a central aspect of the AYCH cornerstones activities, in particular for the Idea Incubation Programme, the International Residencies, the Local Creative Jams and the Transnational Creative Jams. In the AYCH experiential and creative approach, participants not only discover, explore and learn these KETs through making, they are encouraged to use them in order to bring their ideas to life in the form of prototypes. It is during the prototyping process where participants put their KETs skills to the service of an idea they feel passionate about. Through prototyping, technologies take a new meaning and purpose, as they enable young participants to shape their ideas and share them with others. At different stages of a creative process, prototyping is thought to serve multiple purposes as it allows young participants to:

- Get ideas out of their head and make them more tangible, that is, something that can be felt, experienced, worked through, played with and tested.[48]
- Explore problems, ideas, and opportunities within a specific area of focus and test out the impact of small or radical changes in a concept.
- Better understand what makes their concept work or fail.
- Engage with end-users or stakeholders in order to test a concept in ways that reveal deeper insight and more valuable experiences.
- Explain new ideas, motivate or inspire stakeholders and investors towards new ways of thinking and doing.[49]

Prototyping has clear benefits for the innovation process as it allows for the identification, development and evaluation of entrepreneurial opportunities.[50] Within AYCH, the value of prototyping goes beyond the advantages closely related to a product or service innovation as it seems to shape meaningful personal and social interaction experiences. Some of the observed advantages of prototyping for young participants throughout AYCH are:

Transferability of prototyping skills: during the prototyping processes the AYCH participants

[47] Gabriela Gómez and Ricardo López-León, "Impossible Design: Fostering Creativity by Quick and Dirty Prototyping," Insider Knowledge. Learn x Design 2019 (Middle East Technical University, 2019).

; Suzanne Chou and Jesse Austin-Breneman,"Prototyping methods and constraints for small-to-medium sized enterprises in East Africa," Development Engineering, 3 (2018): 117-124.

[48] Todd Zaki Warfel, Prototyping A practitioner's Guide (New York: Rosenfeld, 2009), 3.

[49] Rikke Friis Dam and Teo Yu Siang, "Design Thinking: Get Started with Prototyping," Interaction Design Foundation, 2020. https://www.interaction-design.org/literature/article/design-thinking-get-started-with-prototyping (accessed September 2, 2020).

[50] Erik Noyes,"Teaching Entrepreneurial Action through Prototyping: The Prototype-It Challenge," Entrepreneurship Education and Pedagogy, 1 (2018): 118-134.

learned a wide range of rapid prototyping skills such as: sketching, user scenario, role-playing, video, 3D printed/cardboard models, working models. All these skills can be adapted and deployed in other environments and projects.

Confidence and empowerment: in a couple of hours, the participants are able to produce engaging prototypes that allow them to communicate their ideas and get immediate constructive feedback. As the participants prototype and share the results of their process there is an "electric" and vibrant atmosphere.

Learning the value of trying and failing: within AYCH we encourage the participants to try out ideas without the pressure of getting everything right straight away.[51] This approach highlights the value of trying and testing at any stage of a creative process. Most of all, the participants experience how common and important it is to try and fail in order to make progress. By putting prototyping at the core of a creative learning process, we encourage a different and more positive relationship to mistakes that also reinforces the importance of iteration when exploring entrepreneurship opportunities.

Collaboration: Co-building the prototype becomes an element of focus for the whole team and the prototyping process generates a sense of "collective ownership" over the prototype.

Breaking down cultural and language barriers: it seems that prototyping reduces the need for complex language or discussion among multicultural teams. Through making the prototype and being able to share ideas as they touch it and change it; team members find that they can express their ideas more easily and quickly, despite language diversities or differences in backgrounds, disciplines or viewpoints. The prototype becomes an intermediate object that levers non-verbal communication and allows young people that would normally not feel confident enough to speak their mind in groups, to express themselves through the prototype.

Learning through making and prototyping are processes that take place in physical learning environments. We have already discussed how one of the biggest challenges imposed by the Coronavirus crisis was to keep working from an experiential, through making and creative approach at distance and online. One of the main examples of an online learning environment adaptation of our methodologies and tools is the Online Transnational Creative Jam in Santo Tirso.

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[51] *Rikke Friis Dam and Teo Yu Siang, "Design Thinking: Get Started with Prototyping," Interaction Design Foundation, 2020.*
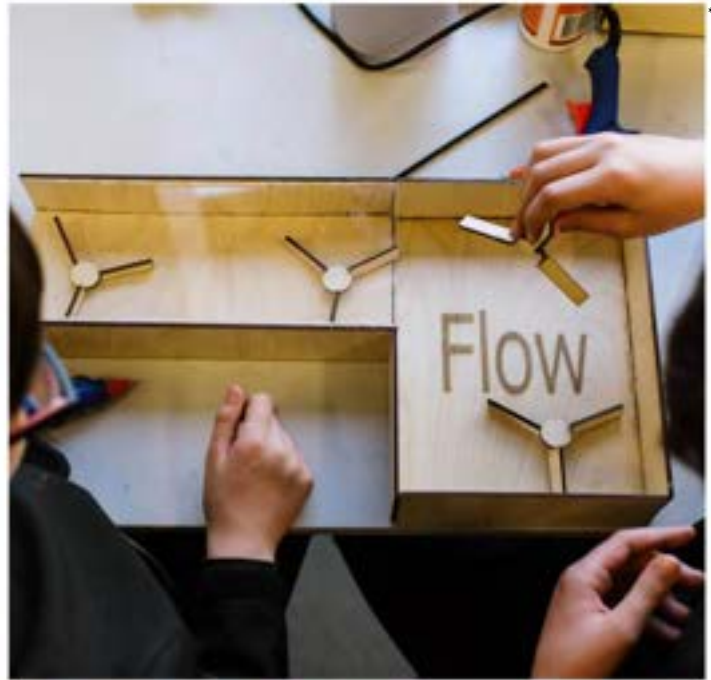
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Sarah Packer, Plymouth College of Art. A young participant making a prototype at the Plymouth Local Creative Jam. Plymouth (UK), 2018.

Prototypes

Collection of prototypes from different Creative Jams
2017-2020. *Pip Raud Photography. **Sarah Packer,
Plymouth College of Art.

B.1 Activity in focus: Creative Workshops in Brest, Brest Métropole & University of Brest Open Factory (France)

The Open Factory Fab Lab is located at the University of Brest. It is a space of 300m² where people are experimenting with innovation. The objective of the Open Factory is for people to learn by making in different areas: food, disabilities, model, sensors, Fab cities and music. To this end, Open Factory is organising very diverse workshops (about innovation, transition, collective intelligence, creation or creativity, one can also find workshops where we use tools such as 3D printers or laser-cutting machines). Various AYCH activities took place at the Open Factory: e.g. the Fab Lab organised workshops during the Idea Incubation Programme and the Open Factory hosted a Local Creative Jam. Every year on a weekend in November a Hackathon is organised, with the objective to collaboratively create a prototype at the end of the weekend around important societal issues.

Among the numerous creative workshops Open Factory has organised or hosted, is the "Music Lab". This musical workshop was created in a collaboration between Richard Doak from Space (UK), an AYCH partner, and Laetitia Dagorn from Locamusic in October 2019 at the Open Factory.

The objective of this workshop was to enable young people from different backgrounds to discover musical creation and how to work with music. This specific workshop was a result of collaborative work between local participants and international facilitators, and it was also a result of trying to reach as many young people as possible.

The impact of the work done by the Open Factory is very significant. For example, Lydiane, who participated in a Local Creative Jam, was so excited and enthusiastic about the AYCH project and what it offers, that she decided later to join the incubation programme. On a broader level, learning through making improves self-confidence and helps people to move out of their comfort zone. In a nutshell, Open Factory and its workshops are a good representation of non-formal education. Our long-term objective is to pursue the great dynamic that AYCH enabled after the project ends. Possible partnerships with other local organisations are already in progress.

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Young people attending a session of the Brest Métropole Incubation Programme at UBO Open Factory. Brest (France), September, 2020.

Eliott ARNAULT
Atelier de Djing et handicap

Sylvain PINOTIE

Camille MANSUY
Projet AYCH « Renée »

Justine BONNO
Projet AYCH « Maison IV

Emilie
Ch

Renée

La casquette upcyklée

Sylvain
Pinotie

Elliot A

B.2 Participant in focus: Camille Mansuy, Brest Métropole (France)

I am an AYCH Ambassador from Brest, France. I graduated from the Brest Business School and I am currently working on a project in the field of fashion and textiles upcycling. The project follows strong ethical and ecological values: it is a hand-made cap locally produced and made from discarded textiles named "Renée la casquette upcyclée". In order to have support in my project definition and development process, I participated in the AYCH local support programme in Brest (April - June 2019) and also benefited from the international aspect of AYCH since I did a 5-day residency programme at Plymouth College of Art in February 2020.

Developing a project from an idea to a "thing" can be complex and hard work. During my participation in AYCH, I reflected upon different aspects of my project through Design Thinking tools that simplified the task and accelerated the process in unexpected ways. Identifying key local stakeholders (funders, textile providers, technical experts, etc) was another challenge that was addressed during the development of my project. For instance, the tailor, who proved to be essential for defining and developing my project, was identified and contacted as a result of my participation in AYCH. Thanks to AYCH I put my project into perspective; taking into account larger key environmental and societal issues. As a consequence, the green clothing and local economy approaches took an even more important place in the project definition. Whilst being at Plymouth College of Art, I also had the opportunity to discover another market and I learned from comparing the local market of Brest with the market of Plymouth.

The aspect of the AYCH local support programme that I valued most was that the participant's personal projects were put at the heart of every theoretical notion explored. The use of prototyping as a way of better defining particular aspects of my project, also immensely helped me. With the help of a local tailor, I created different prototypes in order to test various materials, shapes and joining systems. However, prototyping not only has facilitated the evolution of the initial idea from technical, functional and aesthetical perspectives; but it has also been a powerful tool to identify key communication strengths of the project. During the AYCH local support programme, a very important part of the process was to create "scenarios" in which I had to present my project to different stakeholders. This process of getting the project out to the real world (prototyping)

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Camille Mansuy presenting her project "Renée la casquette upcyclée".
Brest (France). October 2019.

through different methods (scenarios, physical prototypes) is still key for making quick progress in my creative process.

Although I have already produced a batch of caps that could be commercialised, there are still some challenges to face for accomplishing my project. Caps didn't really work as the subcontracting was too expensive, so I decided to reorient my business on hair accessories that I can self-produce and which are made with the same principles as the caps. Accessories are more profitable and it is easier to find a place to sell them. I now have a website through which I sell my products. The project has been delayed because of the Coronavirus lockdown but I have made huge progress since the beginning of my AYCH adventure. For the moment I am building this project so that in the future I will be able to be self-employed and self-sufficient.

C. Transnational Creative Jams

Transnational Creative Jams are annual events that bring together all the AYCH project partners as well as young people from across the Atlantic area. Conceived by Plymouth College of Art and l'École de design Nantes Atlantique, the common thread for the 3-day event is a particular methodology that allows the participants to quickly bring their ideas to life via quick prototyping techniques.

During 3 intense days of workshops, creative ideation and prototyping, the young participants are encouraged to learn social entrepreneurship skills through experience and in particular through making. The Transnational Creative Jams' vocation is to spark innovative projects facing the societal challenges of our time.[52] In this sense, each Transnational Creative Jam focuses on one particular current sustainability issue in response to which the participants have to ideate, create and prototype solutions (in the form of product, services, interphases or spaces):

In the course of the AYCH project, 3 Transnational Creative Jams took place:

Lugo, Galicia (Spain)	11-13 April 2018	Reducing plastic in the ocean	In person
Gijón, Asturias (Spain)	2-4 April 2019	Reinventing your City	In person
Santo Tirso (Portugal)	10-11 December 2020	Re-inventing the Future	Online

The Transnational Creative Jams proved to be a great opportunity for the AYCH partners to exchange their specific knowledge and build a common understanding of the project culture, its challenges and the Design-driven creative approach to entrepreneurship.

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[52] *Florent Orsoni and Olivier Raud, "Le Creative jam : catalyseur d'un projet européen de coopération autour des questions de créativité et d'entrepreneuriat," Questions de Pédagogies dans l'Enseignement Supérieur, (Faire) coopérer pour (faire) apprendre? (Brest: Actes QPES, 2019).*

AIMS & OBJECTIVES

For young participants, the Transnational Creative Jams offer the opportunity to discover a system of social entrepreneurship in a non-theoretical way, by experiencing, and by experimenting through making and prototyping. The overall experience seeks to create opportunities for them to recognise in themselves and develop transferable skills: empathy, collaboration, resilience, experimentation, among others. We facilitate the transition from being a consumer to being a creator and open up new perspectives by meeting specialists and other young participants from very different disciplinary backgrounds, interest and nationalities.

Having the opportunity to learn how to use Key Enabling Technologies is fundamental for the young participants to bring their ideas to life more easily. In this process, we show the importance and gain the ability to do quick and dirty prototyping.

For the AYCH partners & hubs, the Transnational Creative Jams are an opportunity to instil close relationships among youth services, higher education and non-formal education, and identify opportunities for further collaboration.

AN ADAPTABLE METHODOLOGY

Creative Jams are conceived in an experimental and iterative way. The methodology and tools used are previously tested, adapted and improved as they are used in Local Creative Jams or specific workshops run by the AYCH partners. Every Transnational Creative Jam is followed by a period of analysis and reflection that allows the partners to make modifications to the methodology and to the tools, based on the real experience with young participants. This approach enables the AYCH partners to propose new innovative tools through which the participants engage in the practice of entrepreneurship.

The Creative Jam methodology and its tools are adapted based on the event, the participants' experiences, the material and time resources available and the partner's priorities at the time. However, in the diagram below, we have identified a series of are key ingredients and steps to facilitate a successful Creative Jam.

KEY ELEMENTS
TO PUT IN PLACE FOR
A CREATIVE JAM

BEFORE THE CREATIVE JAM

DEFINITION OF A TRANSVERSAL **THEME**

CREATIVE AND DESIGN THINKING TOOLS CONCEPTION
based on the subject, the participants and the material and time resource available

TOOL TESTING
with real young people before the event

DEFINING WORKING TEAMS

TRAINING THE FACILITATORS
around the tools and procedures

DEFINE CLEAR GUIDELINES
that should be accessible in different medias and at any time by all participants during the event, written, oral, video, drawings

DURING THE CREATIVE JAM

1 IMMERSION
of the participants to the subject and getting them inspired by real life immersion or by presenting associated audiovisual content

2 KEY ENABLING TECHNOLOGIES WORKSHOPS

3 COLLECTIVE IDEATION & IDEA VISUALISATION
within small teams brainstorming, Idea Wall

4 CHOOSING AN IDEA
to develop further by the team

5 CREATING SCENARIOS
around the chosen idea

6 QUICK AND DIRTY PROTOTYPING
to make a prototype product with materials and tools at hand

7 PITCHING
to other participants and experts for feedbacks and evaluation

AFTER THE CREATIVE JAM

8 REFLECTION & ANALYSIS
of the experienced process self-evaluation

After a series of 3 Transnational Creative Jams, we have identified a number of factors that are very important when putting in place this methodology. The use of simplified creative and visually rich design tools in order to overcome language barriers. Immersing young participants in a real-life context where they can gain insights through participant observation into the specific circumstances, needs and strengths of local communities, in regards to the main subject. Looking for simplicity of the response in favour of the better implementation of tools. Finally, putting in place tools and the time to encourage the participants to reflect on their learning experience.

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Young people working at the Hackathon. Lugo Transnational Creative Jam, Lugo (Spain), April 2018.

C.1 Activity in focus: Transnational Creative Jam Gijón, Gijón City Council, Spain

This 3-day transnational event gathered 4 nationalities, 72 young people from 16 to 30 years old and 30 mentors. The central and transversal theme of the whole event was "Re-imagine Your City" which covered topics such as mobility & transport, low carbon, circular economy & regeneration, community & solidarity and health & wellbeing.

The event aimed to provide young participants with a transnational creative experience through different collaborative workshops and a one-day long hackathon, but also to disseminate the AYCH tools among the hubs, in particular through the creation of hub mentor groups. This Creative Jam drew lessons from the previous Transnational Creative Jam in Lugo, Spain, in 2018 and from the exchanges that took place during the conference Main Lessons from AYCH in Brussels.

The event consisted of 3 main phases :

Discovery: a time for getting to know the other participants, getting sensitised towards the subject and opening-up to new ways of thinking about it. Three key activities took place during this phase. "City discovery through Design Thinking", helped to set the context for complex urban issues central to the Transnational Creative Jam. The "Idea Wall", was an ice-breaker where participants were encouraged to brainstorm and exchange around the main subject, to then crystallise their beliefs and ideas around the city of the future with the help of a set of images. And "Bright Mirror" a tool created by the illustrator Oliver Balez, which encourages participants to create a common futuristic vision of cities in 2045 and bring them to life through different mediums such as drawing, rapping, story-telling, poem writing and fictional journalism.

Learn & Explore: during this phase, the young participants attended Creative, Enterprise and Digital workshops. Creative workshops involved activities such as illustration, filming, space design, sound design, augmented reality, virtual reality. Enterprise workshops covered business canvas, business modelling, Ecodesign, EU opportunities and Design Thinking. And Digital workshops involved topics such as Arduino media keys, digital fabrications, augmented reality, mobile apps, node-red IoT, Virtual Reality.

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Young people participating at the Gijón Transnational Creative Jam. Gijón (Spain), April 2019.

GIJÓN TRANSNATIONAL CREATIVE JAM
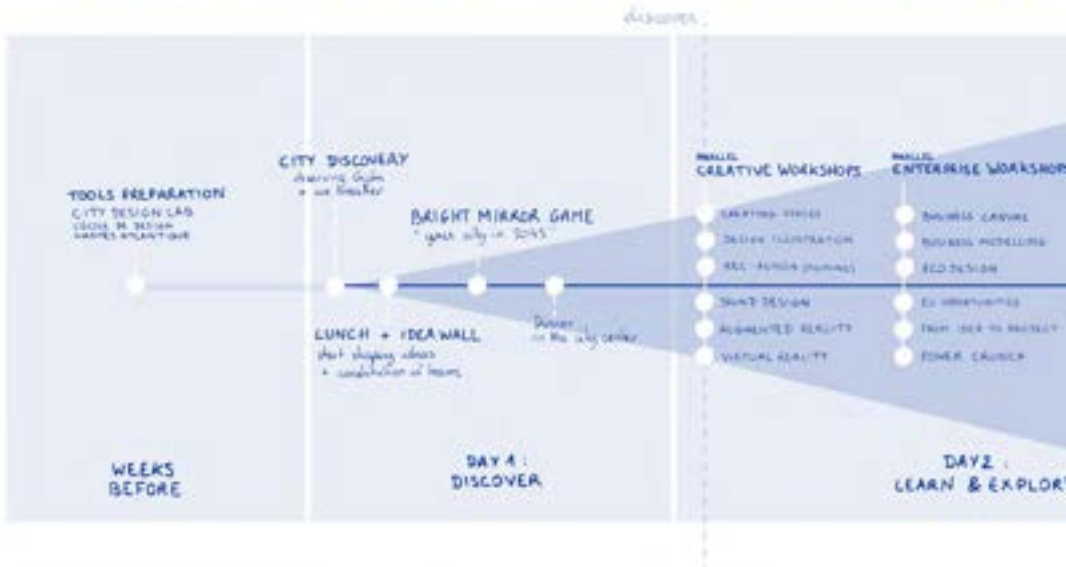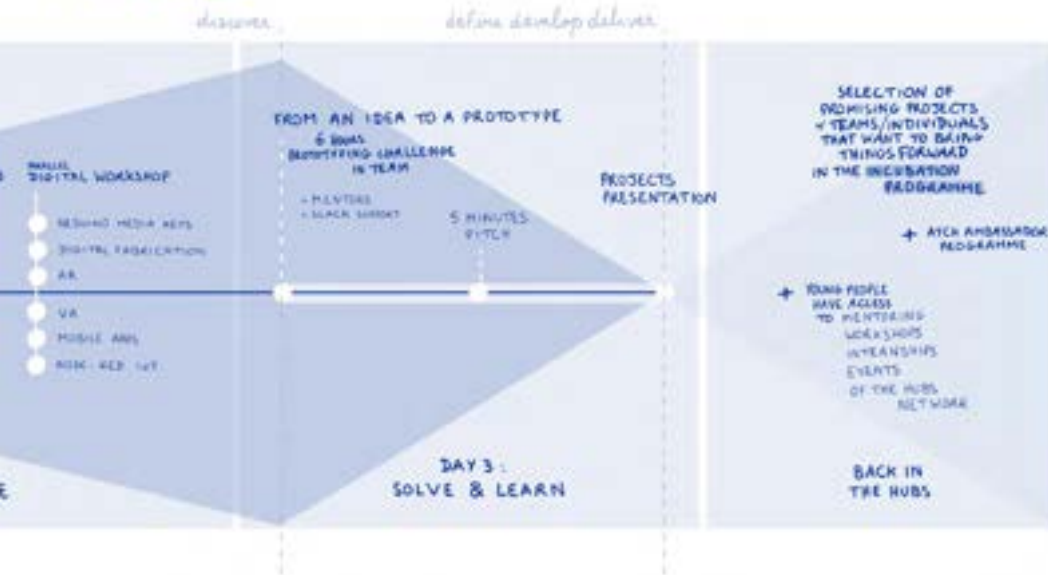
Solve & Create: this phase consisted of a full-day hackathon where the group of young participants worked collaboratively to bring to life their ideas through quick prototyping. In the process, the young participants were coached by the different hubs' mentors. The young participants then pitched their ideas to a judging panel. Three special awards were given to the "Best Project", "Most investable" & "Most impactful".

We learned that communication before, during and after the event is important in generating a successful event. As a public administration body, Gijón City Council used their website and social networks to disseminate the Transnational Creative Jam, in order to convene young people, during the event and afterwards. While material and technical resources such as power strips, cables, screens, sound system, adapted rooms and connectivity are fundamental for a good flow of the collective activities and workshops. The event brought together young participants and mentors with very diverse backgrounds, paths in life, nationalities and languages; which made the exchanges particularly rich and proved the need of keeping guidelines very simple, image-based and accessible in multiple media.

PROCESS

discover   define develop deliver

PARALLEL DIGITAL WORKSHOP
- RESOUND MEDIA ARTS
- DIGITAL FABRICATION
- AR
- VR
- MOBILE APPS
- BASIC WEB ART

FROM AN IDEA TO A PROTOTYPE
6 HOURS
PROTOTYPING CHALLENGE IN TEAM
+ MENTORS
+ SLACK SUPPORT

5 MINUTES PITCH

PROJECTS PRESENTATION

DAY 3:
SOLVE & LEARN

SELECTION OF PROMISING PROJECTS + TEAMS/INDIVIDUALS THAT WANT TO BRING THINGS FORWARD IN THE INCUBATION PROGRAMME

+ AYCH AMBASSADOR PROGRAMME

+ YOUNG PEOPLE HAVE ACCESS TO MENTORING WORKSHOPS INTERNSHIPS EVENTS OF THE HUBS NETWORK

BACK IN THE HUBS

At a local scale in Gijón, the development of this Creative Jam was a boost to the incubation activities of projects in its hubs. Since the Transnational Creative Jam, the project incubation processes have been constantly taking place. In terms of networking, there has been an intensification of relationships with the local actors involved in Transnational Creative Jam. In this sense, a few months after the event, Gijón held a Local Creative Jam with the same local partners. And Gijón City Council is developing the AYCH Project in collaboration with IMPULSA Gijón, which provides the training and the management of the incubation processes; Fundación Municipal de Cultura, Educación and Universidad popular, with whom a second Local Creative Jam will be organised. Gijón Smart Chair and MEDIA LAB Chair, from the University of Oviedo.

C.2 Participant in focus: João Sousa, Câmara Municipal de Santo Tirso (Portugal)

I am 20 years old, and I have had a surprising flying start as a fashion designer. I took the first steps in fashion at the age of 15, when I joined Escola de Moda do Porto where I studied for 3 years. My first contact with AYCH was in 2018 during the first Transnational Creative Jam, in Lugo, and, ever since I have been connected to the project and to the Hub "Fábrica Santo Thyrso". I was one of the participants of the first edition of the AYCH Idea Incubation Programme, with a project named Tyrso Design Cube, which represents a creative, professional and personal development Platform for creative young people offering a support programme and spaces for Co-Working and Leisure. Through this my project is gaining new ramifications, because in addition to fashion I am extending the performance to other creative areas.

Since then, I have developed my own brand and created 2 different fashion collections. In 2018 I won the young creators contest of Portuguese Fashion News that led me to present a collection on the young creators' platform of Portugal Fashion - the main Portuguese fashion event - Bloom. This is a space that moves away from the catwalk concept and introduces new creators into a more informal, urban and multi-artistic environment. I presented my first collection for Spring / Summer 19 entitled "Filhos do Lago". The experience went so well that I was invited to participate again in 2019 with my vision for Autumn / Winter 2019 with my collection "Refuge", integrating the new Bloom platform, Bloom Upload, that was mentioned by Vogue Italia as one of the best in Portugal Fashion's winter edition.

One of the highest points of my AYCH involvement was my international residency at Plymouth College of Art. As an AYCH ambassador, AYCH for me is a project that gives us the opportunity to create our business, meet new people and travel to meet new realities. AYCH opens windows, doors and helps us build a house in which young people dream.

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João Sousa working at Fábrica de Santo Thyrso. Santo Tirso (Portugal). 2019.

MOVING FORWARD

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AYCH partners for a Steering Committee Meeting before the Gijón Transnational Creative Jam, Gijón (Spain), April 2019.

Throughout this book we have presented and analysed the AYCH principles, values, work and experiences around learning entrepreneurship skills through an experiential, creative and design-driven approach. This section aims at summing up the contributions and opportunities that AYCH has created, or can potentially create for its young participants, partners, specialists and other stakeholders at a local, regional or international level.

IMPLICATIONS AND OPPORTUNITIES FOR THE YOUNG PARTICIPANTS

AYCH has engaged young participants from all backgrounds and paths in life, in a completely different way of learning about entrepreneurship for complex social and environmental issues. In the process, AYCH has given participants the opportunity to learn about themselves, their ideas and their skills as their creative potential unfolds. Through their AYCH experience, young participants embrace their empathy, their intuitions and learn the power of mixing "blue-sky thinking" with rigorous thought. They experienced first-hand how the creative process is enhanced as they made their ideas tangible through prototyping. AYCH showed them that it is possible to bring to life meaningful projects and still feel free, have fun and make mistakes.

Through their transnational experience, young participants and volunteers of the project have been confronted with people with different cultural backgrounds, ways of thinking and doing. These exchanges have fostered their divergent thinking, enriched their projects and given them a sense of validation as they shared their ideas and work with participants and specialists from all over the Atlantic region.

The AYCH experience has opened up professional paths and opportunities for many of the young participants and volunteers in the project. We have seen how some young participants discovered their skills to help other young people in their idea or business development process as AYCH Ambassadors. Some young participants now take part in AYCH events as specialists. Others discovered their passion to develop facilitation tools and now facilitate people and institutions to work collaboratively by integrating some of the AYCH methods. Many young people have acknowledged the transferability of the skills they learnt in AYCH to other contexts and fields.

Finally, AYCH has for many participants given the opportunity to have their voices heard. By bringing their projects to life and sharing them with the AYCH network, young participants have also shared their vision about the complex issues they are passionate about. Many participants

gained confidence in themselves and in their ideas, as an international group of young people, specialists and other stakeholders showed great interest in their work. Participants have taken part in a network of people with common interests, where diversity is seen as a strength and where they can free themselves from stereotypes and self-imposed limits.

IMPLICATIONS FOR THE PARTNERS, SPECIALISTS AND STAKEHOLDERS

One of the main implications of this AYCH path for the partners, specialists and stakeholders has been to maintain our focus on young participants' needs. This has been a fundamental aspect of AYCH but it has also been a challenge, especially when there are many other financial, logistical, organisational and methodological demands at a local and international level. We believe the best way to continue the project, and create transformational experiences for young participants, is by putting their needs at the centre of all our reflections, exchanges and actions.

Another critical aspect of AYCH is to put in place a support system for young participants beyond the end of the project. It seems necessary to keep nourishing the network of young participants, AYCH Ambassadors, specialists and stakeholders so participants can continue working, developing and putting realising their ideas or projects.

Our ultimate aim has been to help shape young people's professional futures in the way they wish or dream of, so they can assume responsibility and feel capable of succeeding and shaping the future.

LOCAL AND REGIONAL DISSEMINATION AND NETWORKING ENGAGEMENT

Through its objectives and activities, AYCH has fostered the creation of local collaboration networks between the AYCH local partners and different local, regional and international groups. We have delivered a "different entrepreneurship" to the existing programmes and projects run by the local and regional administrations, local associations and local higher-education, formal and informal education communities.

AYCH supports existing local incubators by bringing new methodologies and ways of interacting with young people. We have spread the AYCH values, principles and methodologies by involving other social stakeholders with special emphasis on the needs of cross-border areas and cross-border issues. For instance, associations working on the Portuguese-Spanish cross-border territory and immigration associations in search of a future for Latin American young people in Europe.

AYCH has created synergy with other Interreg Projects working on similar issues. For instance, the Training the Trainers programme through which the partners Plymouth College of Art, Vida Láctea and Space exchanged good practices, methods and tools around social entrepreneurship with the partners and practitioners of the Central European INTERREG project IN SITU.

We have collaborated and participated in events and exchanges beyond the Atlantic region to share good practice and look for opportunities to work with new partners. For instance, the European Year of Cultural Heritage 2018 in Vienna, in "Salónika" Thessaloniki in Greece, the BaltSe@nioR - 2.0 project in Poznan, The Future of the Atlantic Arc-A local vision 2019 in Brussels, the European week of Regions and Cities 2020 in Brussels, and the Tate Exchange 2019 in London, among others.

MEANINGFUL CONTRIBUTIONS FOR A CHANGING, COMPLEX, BETTER WORLD

This is a rapidly changing world: socially, environmentally, politically and economically. In AYCH we are moving forward with the idea of making a better future, even at the individual's scale of skills, awareness or sensitivity. As individuals, institutions and regions we have to "own" the responsibility for positive change and equip ourselves with the tools to proactively act for the benefit of the whole global ecosystem of which we are only a part. The young people themselves have a different view about how they wish the world to be. We saw some of their visions come to life in the form of product and service ideas. Their views are informed and critical, not just about the environment, but about basic principles of fairness and common endeavour. We hope that each idea and project developed within AYCH is a small step towards a more sustainable world.

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This book is a truly collaborative effort. It's a testament to a partnership approach which stretches between learners and specialists, young people and those that have been around longer and people who started as strangers and who have become friends. To list everyone separately may risk an unintentional omission but most of all it would not reflect the spirit of the interdependent journey we have travelled together. Our acknowledgement is to young people, who joined to learn but who have begun to lead the way and shared their stories, to experts who shared their knowledge, skills and enthusiasm and who learnt with us too, and to our hub organisations and AYCH team members who valiantly tried to condense years of work in to a few paragraphs.

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This book shares the experiences following 4 years of collaborative and transnational work of the INTERREG project Atlantic Youth Creative Hubs (AYCH), that involves partners from France, Spain, Portugal and the United Kingdom. AYCH works with young people between 16 and 30 years old from all backgrounds and levels of studies, who haven't had the circumstances to explore their true interests and unlock their capacity to innovate within traditional education models. Through a creative experiential learning approach that draws on Key Enabling Technologies, Design Thinking and Prototyping, AYCH encourages, enables and equips young people to find short and long-term solutions to the volatile, uncertain, complex and controversial challenges of the world we live in. This book presents our approach by focusing on the young participant's experiences and the activities carried out by the project's partners.

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