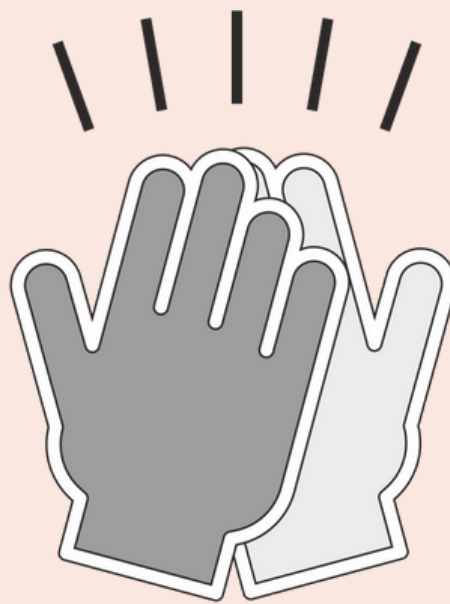




Erasmus+

2019-1-PL01-KA203-065784



**HIGH 5**

# INTEGRATED DESIGN

**HANDBOOK  
OF GOOD  
PRACTICES**

---

2022



## INTEGRATED DESIGN - Handbook of good practices

© High5 Erasmus+ project consortium, 2022

Lodz University of Technology, Poland

University of Thessaly, Greece

University of Aveiro, Portugal

University of Library Study and Information Technologies, Bulgaria

Tallinn University, Estonia

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This project has been co-funded by the Erasmus+ Programme of the European Union. This publication reflects the views only of the author, the National Agency and European Commission cannot be held responsible for any use which may be made of the information contained therein.

PUBLICATION FREE OF CHARGE

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# Introduction

The project “Transdisciplinary methodology for Integrated Design in higher education” with the acronym High5 was the European cooperation in the higher education sector. Lodz University of Technology (TUL, Poland) was the project coordinator and invited 4 other institutions: University of Thessaly (UTH, Greece), University of Aveiro (UAVR, Portugal), University of Library Studies and Information Technologies (ULSIT, Bulgaria) and Tallinn University (UTL, Estonia) to provide a breath of fresh air at universities concerning education.



The aim of High5 was to create a new methodology - Integrated Design that is based on already existing methods and approaches. However, Integrated Design links complex issues and therefore it can significantly improve teamwork and project realization.



High5 project supports innovative methods in education, provides tools, and shows the approach that is needed in the labour market. The idea developed in High5 is to make education interdisciplinary and open to changes.



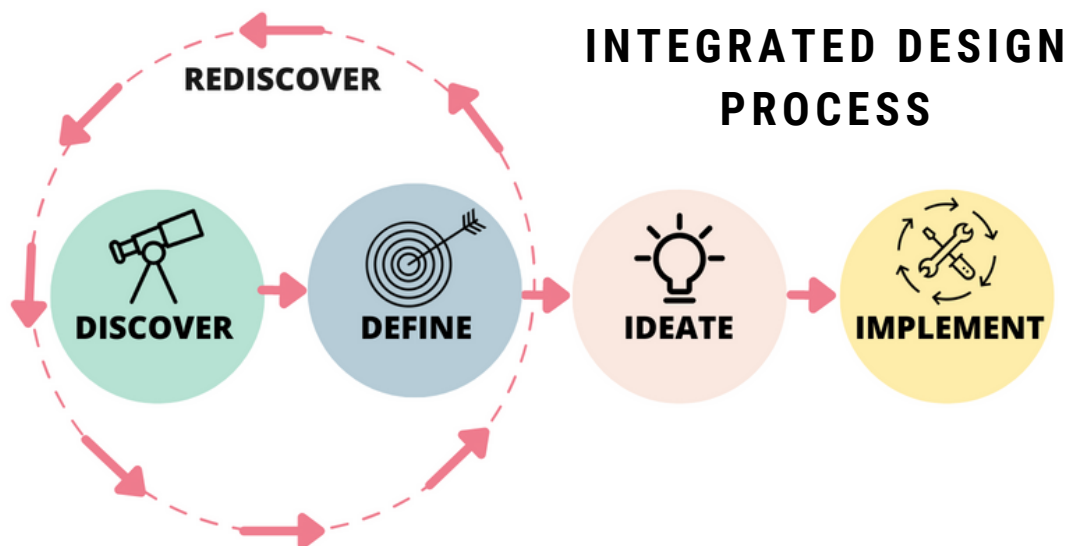
## OUR TARGET AUDIENCE

- educators of various fields, trying to improve their didactic skills
- higher educations students who participate in project-based classes
- all others who are asking the question "How to implement sustainability and circular economy into project work?"

Integrated Design combined valuable areas such as problem-solving methodologies (Design Thinking and Problem-Based Learning), sustainable development, circular economy, innovation thinking, and entrepreneurial skills.

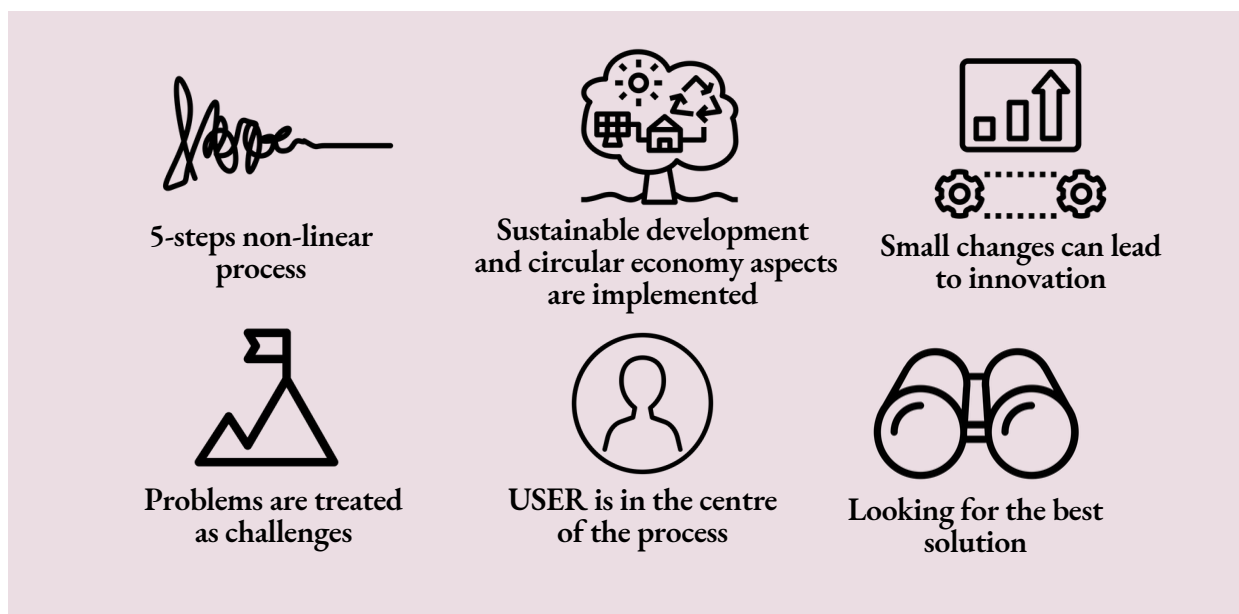
Integrated Design is an answer to the complexity of the world and projects undertaken at universities, in companies, and various institutions. It has also its roots in the requirements of the European labour market where people have to be able to analyze a situation, define a correct problem, provide a suitable solution and be aware of all consequences of the implementation of the chosen solution. This wide perspective is covered by Integrated Design.

In Integrated Design, we can distinguish several steps: Discover, Define, Re-Discover, Ideate, and Implement. Integrated Design is not a linear process that can be visualized as below:



Integrated Design constrains in a nutshell:

### KEY FEATURES OF INTEGRATED DESIGN





# High5 project in numbers

## EVENTS and ACTIVITIES

5 universities from European Union

2 International Summer Schools at University of Aveiro (September 2021) and University of Thessaly (May 2022)

3 International Teachers Trainings:

1 Teachers Training in Sustainable Development

1 Teachers Training in Design Thinking & entrepreneurial skills

1 Teachers Training in Gamification

4 Teachers Training in Integrated Design

3 Transnational Project Meetings in Lodz (November 2019 & August 2021) and Tallinn (August 2022)

1 International Final Conference on Integrated Design in Tallinn (August 2022)

5 Creative Boost Events

3 City Games in Aveiro, Volos and Lodz (September 2021, May 2022, October 2022)

## OUTPUTS

### PEOPLE

15 Teachers trained in Sustainable Development

20 Teachers trained in Design Thinking & entrepreneurial skills

19 Teachers trained in Gamification

61 Teachers trained in Integrated Design

53 Students took part in International Summer Schools

13 Teachers mentored students teams during International Summer Schools

1 Textbook on Integrated Design, Sustainable Development, Circular Economy, Design Thinking, Gamification...

1 on-line course in Integrated Design methodology

11 worksheets for students in 6 languages

10 presentations for students in 6 languages

1 set of recommendations in 6 languages

1 course sheet in 6 languages

1 evaluation method with 3 templates in 6 languages

1 handbook

# High5 project timeline

**November 2019**

High5 project kick-off at Lodz University of Technology, first face-to-face meeting of the consortium



**January/February 2020**

Teachers' Training in Sustainable Development in Tallinn, Estonia



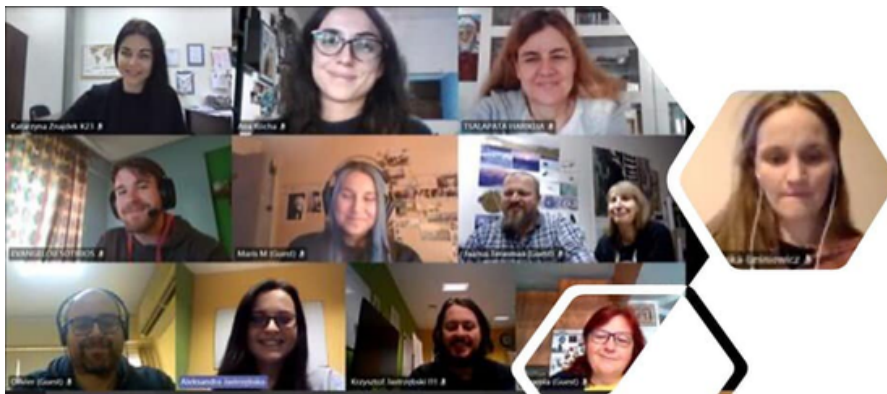
**January/February 2021**

Online intensive Teachers' Training in Design Thinking and Entrepreneurship



March 2021

Online intensive Teachers' Training in Gamification



August/September 2021

First face-to-face consortium meeting after the COVID-19, Mid-term project meeting in Lodz, Poland



September 2021

Summer School in Integrated Design for students, in Aveiro, Portugal





May 2022

Summer School in Integrated Design for students, in Volos, Greece



August 2022

Final conference on Integrated Design and last consortium meeting in Tallinn, Estonia

**Integrated Design Conference**  
On the 29th of August in Tallinn University



October 2022

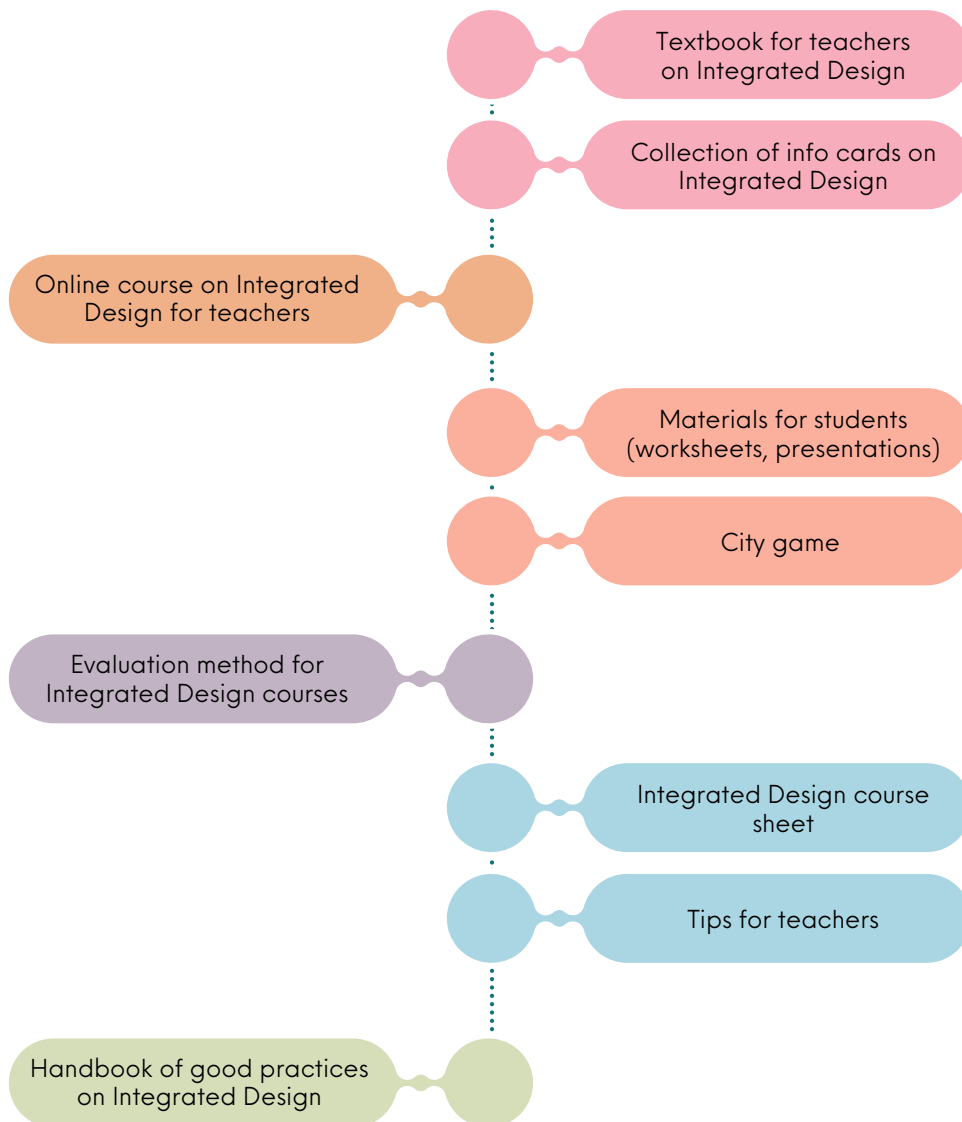
The end of the project realisation



# High5 project results

Within the scope of the project, 6 groups of project results have been elaborated. They were grouped into the following project Intellectual Outputs (IOs):

- IO 1: Teacher's Materials for Integrated Design
- IO 2: Integrated Design online course for teachers
- IO 3: Student's Materials for Integrated Design
- IO 4: Evaluation Method for Integrated Design Team Project
- IO 5: Integrated Design Team Project course programme
- IO 6: Handbook - good practices in Integrated Design



**LIST OF MATERIALS ELABORATED WITHIN THE HIGH5 PROJECT**



# Integrated Design - Perspectives of students

\*STATEMENTS COME FROM AN ANONYMOUS SURVEY

## What students think about the International Summer School (after Aveiro)?

“  
Quite demanding course – 7 days of hard work but the final result satisfied me a lot!  
”

“  
It was a great opportunity to meet new people from other countries and work with them in one team! I discovered a lot of things about sustainability.  
”

“  
I liked our topic – Green Mindset, it’s very interesting and relevant topic. Integrated Design made it easier to tackle such a broad problem.  
”

“  
In Aveiro I got to know peers from other countries, had fun and learn interesting stuff.  
”

“  
New experiences with cool people! Nice mentors and possitive atmosphere!  
”



AVEIRO SUMMER SCHOOL

# Integrated Design - Perspectives of students

\*STATEMENTS COME FROM AN ANONYMOUS SURVEY

## What students think about the International Summer School (after Volos)?

*Great topics of challenges! Great atmosphere that mentors have created! I would like to participate in similar projects in the future!*

*I like: weather, people, teamwork, topic, city and GREECE!*

*New experience and new skills. I learnt more about myself as well. The project brought variety into my life! I appreciate the work of mentors and lecturers. I was very happy to participate in team building exercises and all energizers - it was great FUN!*

*Working in international teams was COOL! Each of us has different background and different experiences, which made our project much better and interesting!*

*Awesome cultural exchange with foreign students and mentors! I liked the lecture about sustainability the most! And the project was very interesting and the topic very current!*



VOLOS SUMMER SCHOOL



# Integrated Design - Perspectives of students

\*STATEMENTS COME FROM AN ANONYMOUS SURVEY

## What students think about the Integrated Design?



*INTEGRATED DESIGN... WAS NOT CLEAR TO ME AT THE BEGINNING. LATER, I REALIZED WHY WE ARE APPLYING IT. MANY TOOLS WERE VERY USEFUL. I AM SATISFIED WITH OUR SOLUTION.*



*INTEGRATED DESIGN METHOD WAS VERY HELPFUL DURING THE PROJECT! WE KNEW WHAT TO DO!*



*LEARNING ABOUT INTEGRATED DESIGN STEPS WAS GREAT EXPERIENCE. I WILL USE THIS KNOWLEDGE AND GATHERED SKILLS IN OTHER AREAS AND PROJECTS. ID ALLOWS TO LOOK AT ANY DESIGN CHALLENGES FROM VERY WIDE PERSPECTIVE, INCLUDING ENVIRONMENTAL, SOCIAL, TECHNOLOGICAL AND BUSINESS PERSPECTIVES.*



*IN CHAOS INTEGRATED DESIGN HELPED US TO ORGANIZE OUR WORK AND DIG DEEPER INTO THE TOPIC! THANKS TO ID, WE MANAGED TO UNDERSTAND BETTER THE TOPIC AND PEOPLE WHO WE ARE DESIGNING FOR... IT IS REALLY COMPLEX APPROACH, AND I LIKE IT!*



*INTEGRATED DESIGN IS NOT ONLY ABOUT INNOVATION BUT ALSO ABOUT OUR ENVIRONMENT, SO I FIND IT REALLY NEEDED.*



# Why are Sustainable Development aspects important in the designing process?

SD aspects are important to consider in the designing process because it allows environmentally and socially sound decisions from the very beginning. This can include reducing undesirable consequences such as pollution, excessive waste output, end-user dissatisfaction, unnecessary energy, and money losses in the manufacturing stage while creating a healthy, safe and inclusive environment. This will remove the need to amend or reform dysfunctional infrastructures or systems later on. Integrated design not only gives us a guide to designing solutions but combines other skills and strategies which are paramount in achieving sustainability.



SUSTAINABLE DEVELOPMENT GOALS BY UNITED NATIONS  
(WWW.UN.ORG)

Sustainability and the SDGs (Fig. 1) should be kept in mind throughout all the steps of the Integrated Design process as they aid us in creating the best possible solutions for our environment, society and economy.

## 1) DISCOVER

The 1st stage concentrates on research and understanding the user's needs. When implementing sustainability we should actually consider two users and their needs - the consumer and planet Earth. This requires us to engage in additional research about sustainability and SDGs overall to gain a better understanding of the field and what the current situation is like. A single SDG can be chosen to focus on to help narrow down the scope.





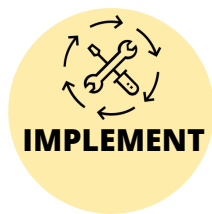
## 2) DEFINE

In the 2nd stage, we distinguish the problematic parts relating to our users. When focusing on a problem in this stage the SDG(s) related to the issue should be identified. Is the issue caused by faulty infrastructure, inefficient products, negligence, pollution, skewed values, poverty, etc? Identifying the SDGs will provide a central point for the following process and solution development.



## 3) IDEATE

The 3rd stage is for brainstorming possible solutions. When designing solutions, SD principles should be taken under consideration (e.g. renewable energy, non-pollutive production chain, 3R strategy, inclusiveness, and equitableness). Thought-out design (e.g. ecodesign) can also enhance sustainability and therefore contribute to SDGs. Some examples include Vancouver Conference Centre which accommodates around 200,000 bees on the rooftop (SDG 9, 11, 15), edible six-pack rings from Saltwater brewery to help reduce marine pollution (SDG 12, 14) or The High Line, an abandoned elevated railway in Manhattan repurposed to a park and a social location (SDG 3, 9, 11). When ideating, additional tools, such as Sustainable Development flashcards can be used. These cards help with problem-solving, prompting users to think outside the box and integrate different goals.



## 4) IMPLEMENT

Before prototyping and testing the chosen solution to learn how to improve it, idea selection must precede. In idea selection, it is important to be critical and assess if it truly makes a difference in a sustainable way. Critical assessment in this stage seeks to find if the users' needs have been met or not. This is paramount in ensuring our idea's positive influence on us and our planet's well-being, helps prevent resource-costly (time, money) changes in later stages, or even in extreme cases prevent the need for damage mitigation that has been caused by faulty design or implementation. Questions to consider when ensuring the product's or solution's sustainability:

- Is the prototype sustainable? Made from sustainable materials? Or encourages sustainable behavior?
- What kind of impact does the solution have on your nearest surroundings (including society and people)? On the environment? On the planet?
- Does the product create pollution in any stages of its life cycle (from raw materials sourcing to „end of life“ treatment)? If yes, how can we change that?
- What is the prototype's purpose? Does the prototype achieve that?
- Which user needs (both the planet's and people's) have been neglected? What needs to be changed?
- Are we contributing to the chosen SDG successfully? How?



# HAKA dance as an activity to boost team spirit – our experiences

## HAKA – what is it?

HAKA is a ceremonial posture dance in Māori culture (New Zealand) that involves the entire body in vigorous rhythmic movements. Actions may include swaying, slapping of the chest and thighs, stamping of the feet, and gestures of stylized violence. It is accompanied by a loud chant or rhythmical shout and, in some cases, by fierce facial expressions meant to intimidate, such as bulging eyes and the sticking out of the tongue.

Haka is usually performed by a group and represents a display of its pride, strength and unity, used as a symbol of group identity. Traditionally, haka was performed as part of the rituals of encounter when two parties met or when a visitor was welcomed into the community. For example, the haka was used on the battlefield to prepare warriors mentally and physically for battle, but it was also performed when groups came together in peace.

Haka are still performed during ceremonies and celebrations to welcome and honor distinguished guests, and to acknowledge great importance of the achievements or occasions. This includes family events, such as birthdays, graduations, weddings and funerals. Several examples of emotional wedding haka can be found on the Internet, here is one of them:



<https://www.youtube.com/watch?v=lhhedH6wK6I>

Although often associated with the traditional battle preparations of male warriors, haka may be performed by both men and women, and several varieties of the dance fulfill social functions within Māori culture. Non-Māori are also welcome to learn the haka. It is important, however, to respect the culture and traditions behind the dance, to understand the meanings behind the chants, the significance of a particular haka and the intentions to be expressed when performing it.



## **HAKA – a strong tool in building and/or enhancing a Team Spirit**

Haka is also used on sports field, in order to challenge opponents and enhance the team confidence. The New Zealand rugby team, the All Blacks, perform the haka before each match in a stunning show of strength and physical prowess. One of such performances of Maori All Blacks Haka, which took place on November 3, 2017 at a sold-out BC Place in downtown Vancouver before facing Canada's Men's Rugby Team, can be watched here:



<https://www.youtube.com/watch?v=vnvI6V-TtLs>

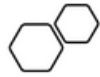
The All Blacks use 'Ka Mate' as their haka, which was composed in the 1820s by the rangatira (chief), Te Rauparaha. The words to this particular haka have become famous around the world since it became a part of the pregame ritual of the All Blacks. The Black Ferns, New Zealand's women's rugby team, are also famous for performing rousing haka. The haka they perform before an international match is called 'Ko Uhia Mai' which means 'Let it be known' and was composed by Whetu Tipiwai. Performing haka by a group of people representing common values and ideas, endeavoring to achieve joint goals, is a powerful activity boosting team spirit and uniting its members. Inventing own haka by a team, in cases when there are not too many participants included, can be even more effective for creating a strong bond between team members.

### **HAKA during our High5 Summer School**

During the second International Summer School in Volos, the teams had 20 minutes to prepare their own HAKA dance. At the beginning, some students were surprised with these tasks but finally, each team managed to create their own version of HAKA dance.

What is important, nobody forced anybody to participate in this exercise – we believed that if someone is not convinced to participate in this type of activity, it is still OK. The majority of students took part in HAKA dance :)

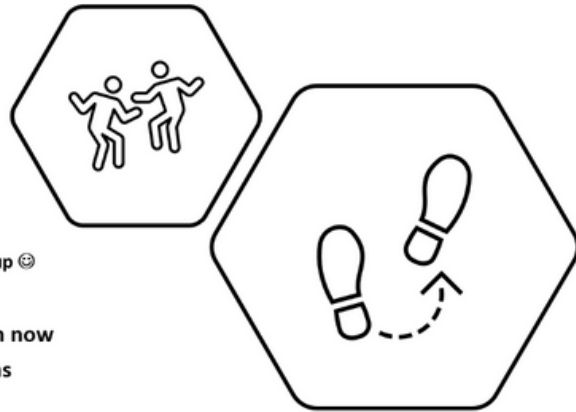
Each team presented its HAKA dance, including the mentors' team. We could feel that teams performed it jointly with engagement and rejoicing, and the whole exercise enabled to build and then enhanced, personal confidence and assurance of team affiliation.



# Let's all HAKA!

Mentors can create a separate group 😊

- 20 minutes for preparation now
- HAKA dances presentations – approx. 1 minute/ team
- It's a team competition !



**TEAMS OF STUDENTS AND MENTORS PERFORMING HAKA  
DANCE DURING THE VOLOS SUMMER SCHOOL ON  
INTEGRATED DESIGN, MAY 2022**

## References:

[1] Cunningham, John M.. "haka". Encyclopedia Britannica, 22 Aug. 2019, <https://www.britannica.com/art/haka>, accessed 16 September 2022.

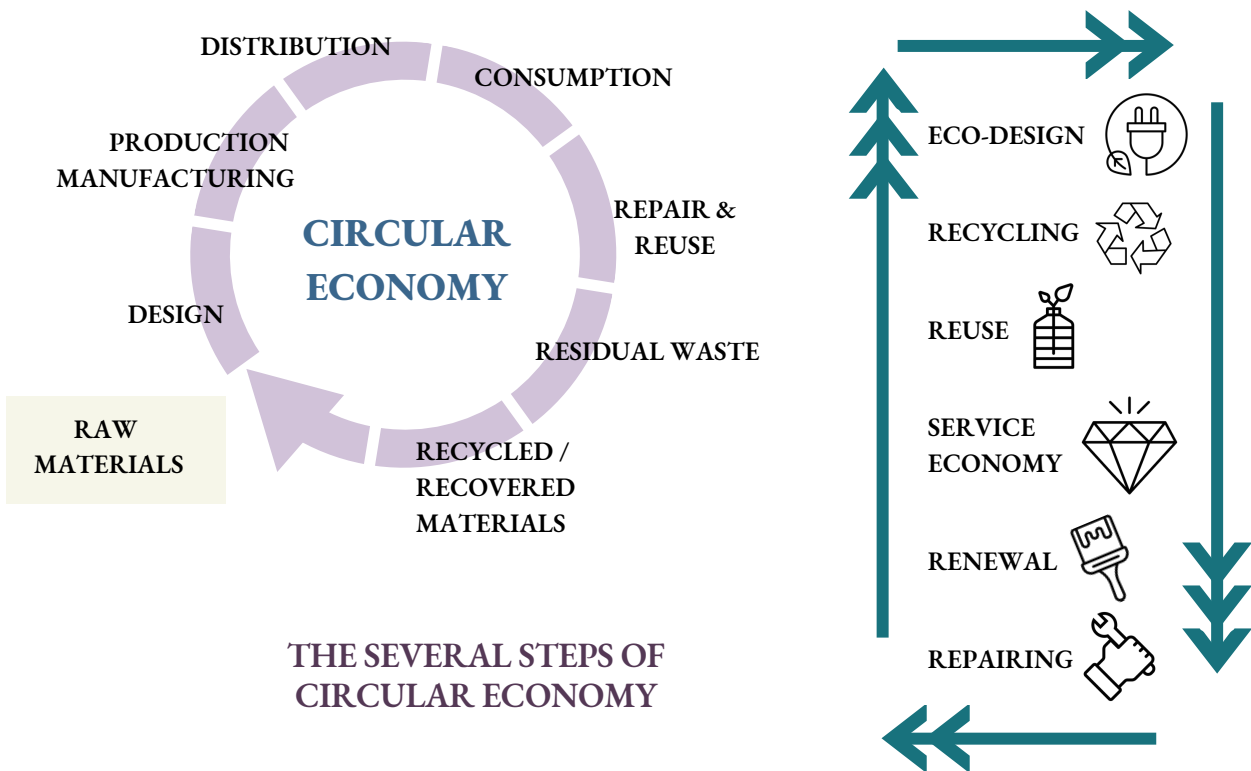
[2] <https://www.newzealand.com/int/feature/haka/>, accessed 16 September 2022.

# How can the implementation of circular economy aspects affect final solutions?

Circular Economy presents a sustainable way to produce, reuse and recycle goods and services, contributing to the sustainable development of economies. And is based on 3 basic principles:

- preserving and valuing natural capital: controlling finite stocks and balancing flows of renewable resources;
- optimizing resources productivity through the circulation of products, components, and materials, both in technical and biological cycles;
- enhancing the effectiveness of the system by reducing harm to human welfare, regarding, for instance, food, textiles, plastics, mobility, shelter, education, health and entertainment, and managing externalities related to land use, air, water, and noise pollution, the release of substances and climate changes.

The circular economy involves the efficient use of raw materials associated with a rational and efficient design, production (re)manufacturing, distribution, consumption, and repair or reuse, in a way that contributes to the minimization of residual waste through the recycling and recovering of materials. All these steps are relevant for the implementation of a circular economy in a specific case (see figures below).

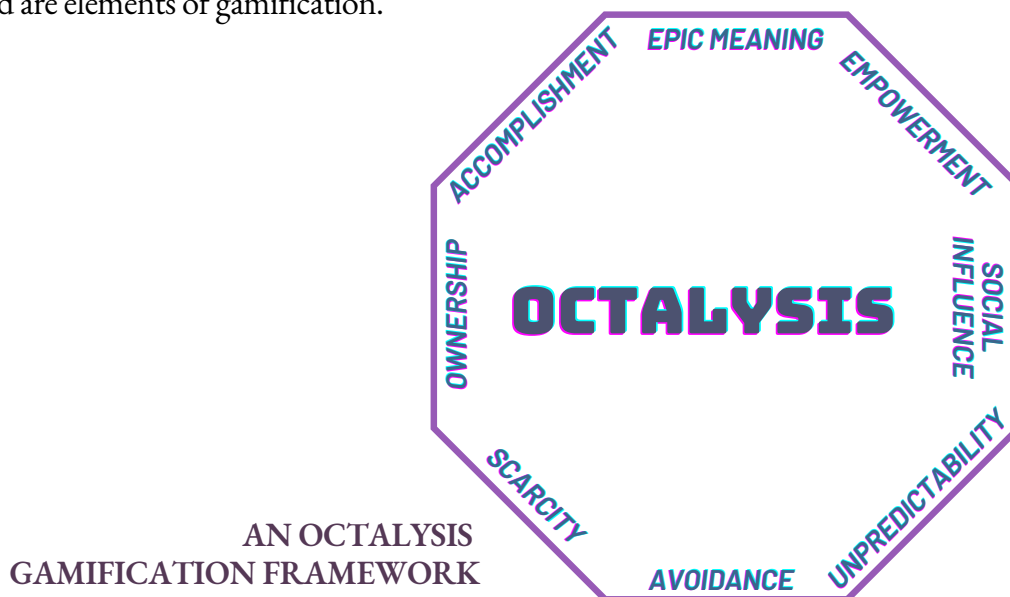


# How can using gamification improve the teachers' courses and the students' projects ?

An issue that teachers need to keep in mind when interacting with their students while they design in teams their solution using Integrated Design is the fact that those solutions and prototypes need to be interesting to the envisioned users to be successful. An interesting way to add interest from the end user is to bake into the product some levels of gamification.



Gamification is the application of game-design elements and game principles in non-game contexts. It aims at raising the users' engagement level and hence significantly improving the general outcome of the task at hand. Teachers can introduce some notions of gamification by talking about something students are very acquainted with, gamification in courses. In the scope of education, gamification can be used for improving the student's interest in the courses or their grades or their working methodology, or any other aspect the teachers will want to focus on. Grades, leaderboards, gratifications, and public honors, are something all students have known since they started going to school and are elements of gamification.



Afterward, teachers can mention that even if the exact definition and recognition of gamification as a valuable tool is quite recent, humans have tried throughout history to make existing tasks more motivating and fun. In prehistoric times when a small group of hunter-gatherers would decide to compete against each other in their hunting and gathering, or simply would start keeping tabs on the results of their activities and comparing them to their past records, they were actually practicing gamification. As such, gamification is a very natural thing to do and also some activities are much easier to gamify than others, a certain dose of gamification can always be included in the product the students will be designing.

# Connect the dots - why is it a good idea to link with other works and projects' activities?

Integrated Design, as well as Design Thinking, can sometimes be a time-consuming and demanding process to put into action. Teachers need to procure the right materials such as pens, templates, post-its, and activity-related items. They also need to book the right venue at the right time in order for the students to be able to work collaboratively under the best conditions. The Integrated Design process needs to be planned extremely well by the teacher so it takes exactly the time and supplies that were scheduled. After the activity ends, reviewing and archiving all the work and byproducts of the student's work can be also challenging.

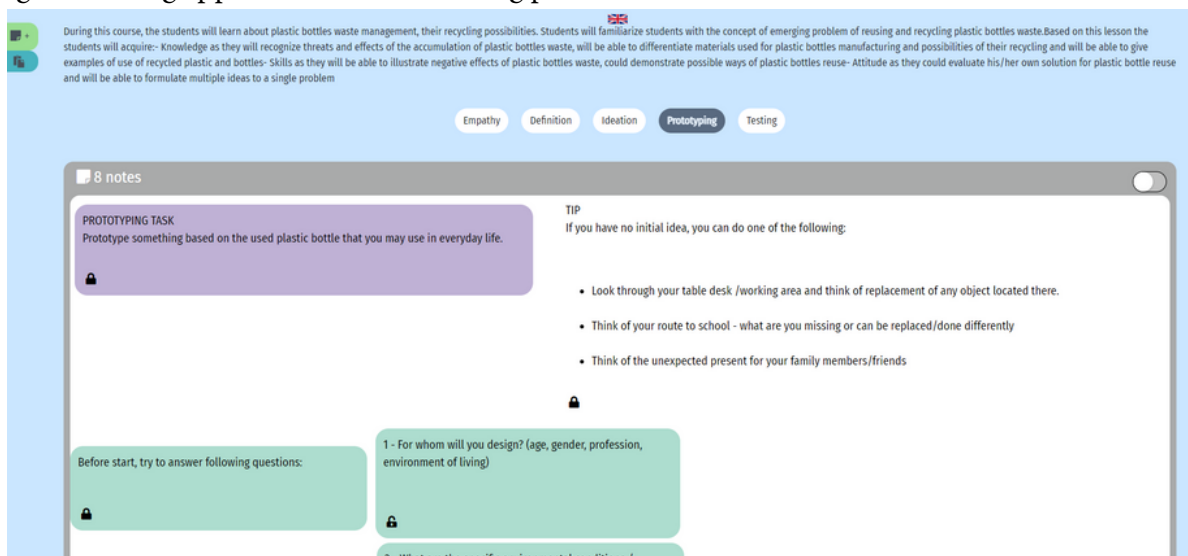
In order to bypass those physical restrictions, it can be interesting to use the Integrated Design process online or in a blended way meshing face-to-face and online activities. To help teachers and students to work online using Integrated Design or Design Thinking, several online platforms have been developed and can be easily accessed. Those platforms allow for a fully asynchronous workflow, full documentation of the entire work timeline of the students, and archiving of their results. They also go beyond the simple pen and paper by fully supporting the use of multimedia documents such as photos or videos.

A few of these platforms are described below.

## 1) Design4Climate project platform



Design4Climate (<https://design4climate.e-ce.uth.gr/>) is geared towards empowering students of vocational schools aged 16-21 by incorporating a circular economy, sustainable development, and a Design Thinking approach into the teaching process.

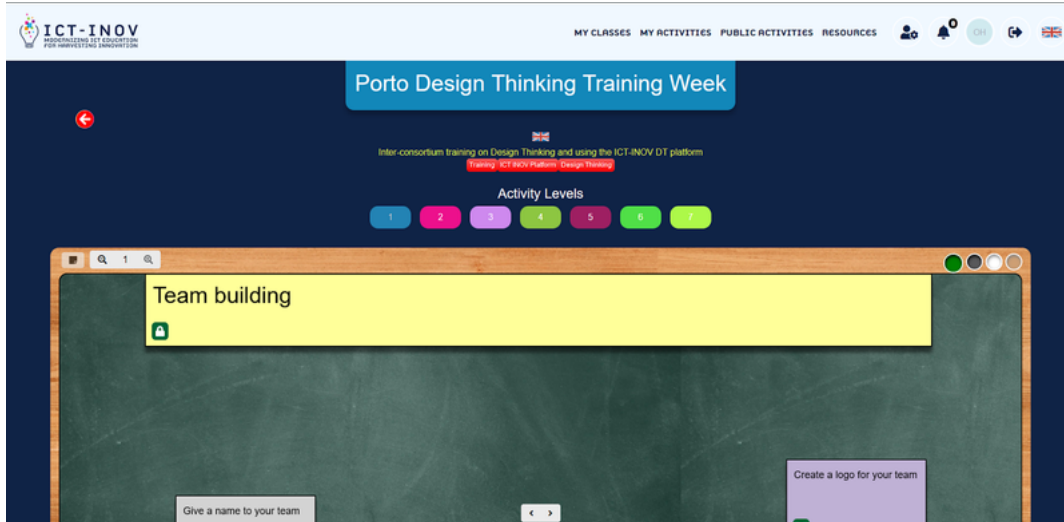


DESIGN4CLIMATE PLATFORM

## 2) ICT-INOV project platform

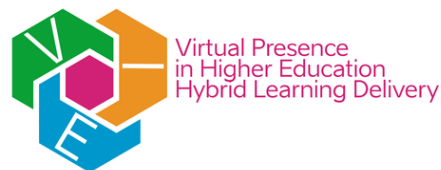


ICT-INOV (<https://ictinov.e-ce.uth.gr/>) promotes the development of innovative educational offerings experiential and active learning design to digital collaboration tools promoting enriched educational experiences through enhanced communication and collaboration.



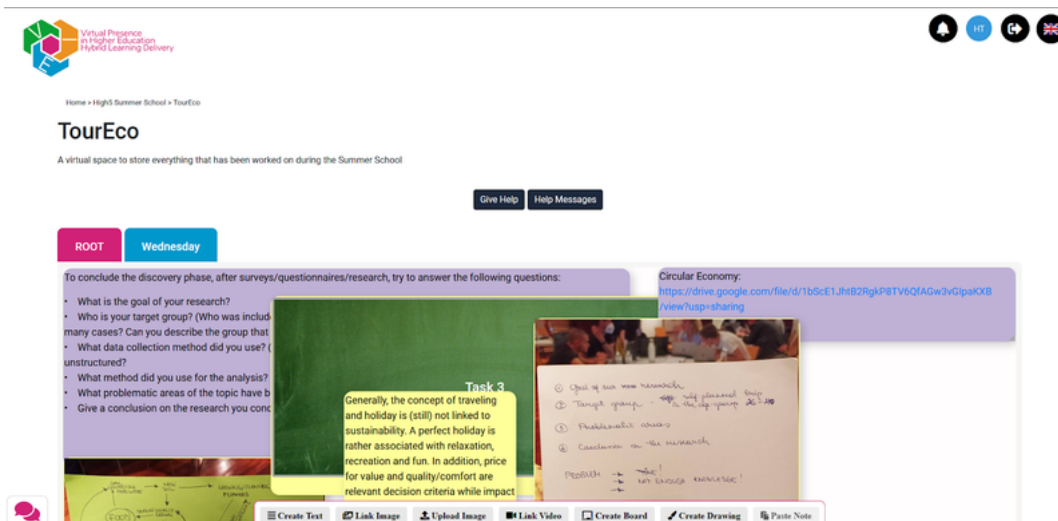
ICT-INOV PLATFORM

## 3) VIE project platform



VIE (<https://vie.e-ce.uth.gr/>), is a collaborative platform that aims to implement virtual presence and group work anywhere, anytime, in a manner that closely simulates face-to-face communication. The platform offers activities inspired by real-life situations and linked to the learning goals and needs of the higher education sector.

The VIE platform was used in the framework of High5 second summer school in Volos.



VIE PLATFORM

# How did we implement 16 personalities test and why?

The 16 Personality types test (<http://www.16personalities.com/>) is based on the Myers-Briggs Type Personal Indicators. It supports an understanding of different personality types. Each individual has own way of perceiving information and acting. Some people were born leaders the other defenders or mediators and so on. All types describe the balance between traits (Figure 1):

- **Introvert** and **extrovert**: How people interact with their surroundings
- **Observant** and **intuitive**: How they see the world and process information
- **Thinking** and **feeling**: How they make decisions and cope with emotions
- **Judging** and **prospecting**: How they approach work, planning and decision-making
- **Assertive** and **turbulent**: How confident they are in their abilities and decisions

extraversion **e** or **i** introversion

opposite ways to direct and receive energy

sensing **s** or **n** intuition

opposite ways to take in information

thinking **t** or **f** feeling

opposite ways to decide and come to conclusions

judging **j** or **p** perceiving

opposite ways to approach the outside world

THE FOUR MYERS-BRIGGS PREFERENCE PAIRS

There are four main groups of personality (Figure 2):

**Analysts - Visionaries** - Motivating visionaries is the need to understand and synthesize complex information, anticipate future trends and focus on long-range goals. They enjoy new ways of doing things: developing, designing and building models, theories and systems. They can look at the big picture and help define new ideas or design new ways of doing things:



Architect (INTJ) imaginative and strategic thinkers, with a plan for everything. An Architect is a person with the Introverted, Intuitive, Thinking, and Judging personality traits. These thoughtful tacticians love perfecting the details of life, applying creativity and rationality to everything they do. Their inner world is often a private, complex one.



Logician (INTP) - innovative inventors with an unquenchable thirst for knowledge. A Logician is someone with the Introverted, Intuitive, Thinking, and Prospecting personality traits. These flexible thinkers enjoy taking an unconventional approach to many aspects of life. They often seek out unlikely paths, mixing willingness to experiment with personal creativity.



Commander (ENTJ) - bold, imaginative and strong-willed leaders, always finding a way or making one. A Commander is someone with the Extraverted, Intuitive, Thinking, and Judging personality traits. They are decisive people who love momentum and accomplishment. They gather information to construct their creative visions but rarely hesitate for long before acting on them.



Debater (ENTP) - smart and curious thinkers who cannot resist an intellectual challenge. A Debater is a person with the Extraverted, Intuitive, Thinking, and Prospecting personality traits. They tend to be bold and creative, deconstructing and rebuilding ideas with great mental agility. They pursue their goals vigorously despite any resistance they might encounter.

**Diplomats - Idealists** - tend to envision an ideal world and want to work toward creating that vision. Sometimes seen as overly optimistic, they genuinely strive for an ideal they believe is real. They often are sensitive to others' emotional needs and skillful at bringing out the best in people. They have a strong desire for harmony and are good at conflict resolution:



Advocate (INFJ) - quiet and mystical, yet very inspiring and tireless idealists. An Advocate is someone with the Introverted, Intuitive, Feeling, and Judging personality traits. They tend to approach life with deep thoughtfulness and imagination. Their inner vision, personal values, and a quiet, principled version of humanism guide them in all things.

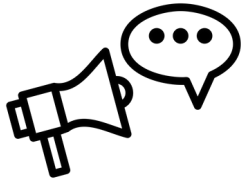




Mediator (INFP) - poetic, kind, and altruistic people, always eager to help a good cause. A Mediator is someone who possesses Introverted, Intuitive, Feeling and Prospecting personality traits. These rare personality types tend to be quiet, open-minded, and imaginative, and they apply a caring and creative approach to everything they do.

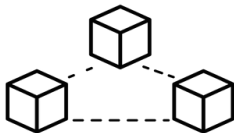


Protagonist (ENFJ) - charismatic and inspiring leaders, able to mesmerize their listeners. A Protagonist is a person with Extraverted, Intuitive, Feeling, and Judging personality traits. These warm, forthright types love helping others, and they tend to have strong ideas and values. They back their perspective with the creative energy to achieve their goals.

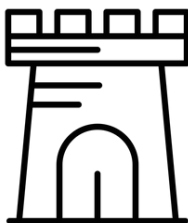


Campaigner (ENFP) - enthusiastic, creative and sociable free spirits, who can always find a reason to smile. A Campaigner (ENFP) is someone with Extraverted, Intuitive, Feeling, and Prospecting personality traits. These people tend to embrace big ideas and actions that reflect their sense of hope and goodwill toward others. Their vibrant energy can flow in many directions.

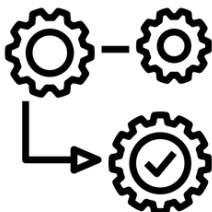
Sentinels - Conductors - are outstanding at gathering the right information, analyzing the options and developing a realistic plan to get things done. They keenly value traditions and customs and believe these traditions provide a sense of safety, stability and belonging. They can orchestrate all the details of an event or project and have a gift for anticipating problems that might disrupt stability.



Logistician (ISTJ) - practical and fact-minded individuals, whose reliability cannot be doubted. A Logistician is someone with Introverted, Observant, Thinking, and Judging personality traits. These people tend to be reserved yet willful, with a rational outlook on life. They compose their actions carefully and carry them out with methodical purpose.



Defender (ISFJ) - very dedicated and warm protectors, always ready to defend their loved ones. A Defender is someone with the Introverted, Observant, Feeling, and Judging personality traits. These people tend to be warm and unassuming in their own steady way. They're efficient and responsible, giving careful attention to practical details in their daily lives.



Executive (ESTJ) - excellent administrators, unsurpassed at managing things or people. An Executive is someone with the Extraverted, Observant, Thinking, and Judging personality traits. They possess great fortitude, emphatically following their own sensible judgment. They often serve as a stabilizing force among others, able to offer solid direction amid adversity.



Consul (ESFJ) - extraordinarily caring, social and popular people, always eager to help. A Consul is a person with the Extraverted, Observant, Feeling, and Judging personality traits. They are attentive and people-focused, and they enjoy taking part in their social community. Their achievements are guided by decisive values, and they willingly offer guidance to others.

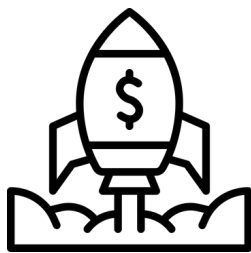
Explorers - Troubleshooters - Troubleshooters are spontaneous and optimistic and trust their impulses to lead them in the right direction. They keenly observe the environment and can assess a crisis and immediately improvise to create a solution. They are bored with routine or with over-thinking "what could happen," preferring to adapt to the situation as it happens:



Virtuoso (ISTP) - bold and practical experimenters, masters of all kind of tools. A Virtuoso is someone with the Introverted, Observant, Thinking, and Prospecting personality traits. They tend to have an individualistic mindset, pursuing goals without needing much external connection. They engage in life with inquisitiveness and personal skill, varying their approach as needed.



Adventurer (ISFP) - flexible and charming artists, always ready to explore and experience something new. An Adventurer is a person with the Introverted, Observant, Feeling, and Prospecting personality traits. They tend to have open minds, approaching life, new experiences, and people with grounded warmth. Their ability to stay in the moment helps them uncover exciting potentials.



Entrepreneur (ESTP) - smart, energetic and very perceptive people, who truly enjoy living on the edge. An Entrepreneur is someone with the Extraverted, Observant, Thinking, and Prospecting personality traits. They tend to be energetic and action-oriented, deftly navigating whatever is in front of them. They love uncovering life's opportunities, whether socializing with others or in more personal pursuits.



Entertainer (ESFP) - spontaneous, energetic and enthusiastic people - life is never boring around them. An Entertainer (ESFP) is a person with the Extraverted, Observant, Feeling, and Prospecting personality traits. These people love vibrant experiences, engaging in life eagerly and taking pleasure in discovering the unknown. They can be very social, often encouraging others into shared activities.

# HOW DOES THE "16 PERSONALITY TEST" CAN HELP IN TEAM PROJECTS? WHAT TO AVOID?

When creating a team it is important to build a diverse team, to have one of each type on a team to provide different perspectives.

Team collaboration is important. Its creation tunes strategies according to the strengths and weaknesses of the individual team members. The synergy between team players helps the team to forward. Some research says (The Remote Company) that

- Similar personalities make for a bad team
- Extroverts dominate the work environment
- Introverts are best for remote work

The High5 team used to create a balanced team according to 16 personalities with two additional restrictions in each team to have :

- participants from different countries - 5 persons in each team from Bulgaria, Estonia, Greece, Poland, and Portugal.
- balance in terms of gender equality - to escape the pure boys and pure girls teams.

The results from the High5 Summer Schools were great for the people which met for the first time and work together. The collaboration in teams was fruitful. Of course, the ice-breaking activities were significant for the success.

## *References:*

- [1] 16 personalities, How to Create a Better Team Using Personality Traits, <https://www.16personalities.com/articles/how-to-create-a-better-team-using-personality-traits>
- [2] The Remote Company (2021) What makes a good team? Our experiment working with different personalities, <https://www.remotecompany.com/blog/what-makes-a-good-team>
- [3] Eric Seiberling How to use personality tests to create balanced teams, <https://www.resourceumc.org/en/content/how-to-use-personality-tests-to-create-balanced-teams>
- [4] Think Insight - MBTI - Understand your personality type, <https://thinkinsights.net/strategy/mbti-personality/>

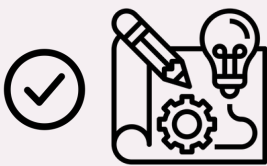
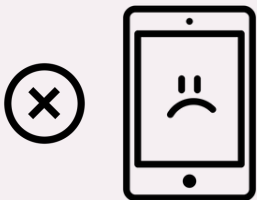
# High5 tips



USE TEAM-BUILDING  
ACTIVITIES



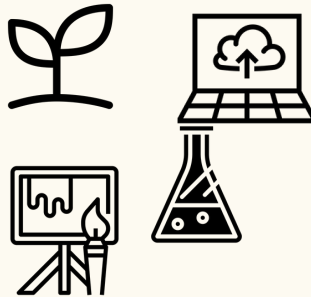
PROVIDE CHALLENGES



MAKE IDEAS REAL BY  
NOT ONLY APPS, BUT ALSO  
REAL-LIFE SOLUTIONS



USE 360 DEGREES  
EVALUATION



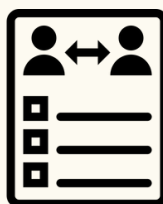
IMPLEMENT INTERDISCIPLINARY  
PROJECTS FORMAT  
FOR BA AND MA STUDENTS



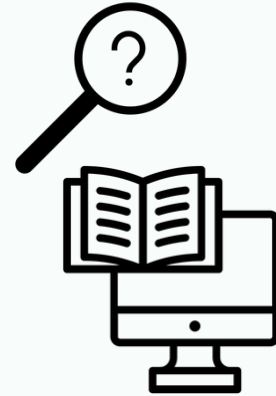
TARGET THE DEVELOPMENT  
OF SOFT SKILLS



THINK HOW  
TO GRADE PROJECTS



REMEMBER ABOUT  
THE VALUABLE  
PEER EVALUATION



USE VARIOUS TYPES  
OF SOURCES



IMPLEMENT ID  
IN THE FIRST YEAR



USE ECTS POINTS



DECIDE ON TOPICS BY  
COLLABORATION WITH  
COMPANIES, INSTITUTIONS  
AND MUNICIPALITIES



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