



**STEAMBRACE**

# GUIDELINE FOR COMPLIANCE WITH ETHICAL AND GENDER REQUIREMENTS

STEAMbrace Deliverable 1.3



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the European Union

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## Table of Contents

DOCUMENT INFORMATION .....	2
DISCLAIMER .....	3
List of Tables .....	5
1. INTRODUCTION.....	6
1.1. Gender Balance and Ethics Plan Introduction .....	6
1.2. STEAMbrace project summary .....	8
1.3. Partner Organizations .....	9
2. GENDER BALANCE PLAN .....	10
2.1. Introduction to gender gap in STEM and STEAM.....	10
2.2. GENDER EQUALITY in EUROPE .....	12
2.3. Challenges for Gender Equality .....	12
2.4. Safe Spaces and Work-Life Balance .....	13
2.4.1. Creating a safe space for all .....	13
2.4.2. Work life balance .....	14
2.5. Challenging Gender Stereotypes and Achieving Equal Participation in STEAMbrace	15
2.6. Addressing the Gender Pay Gap and Country Profile .....	18
2.6.1. Outline for Country Profile.....	19
3. ETHICAL CONSIDERATIONS FOR STEAMbrace.....	20
3.1. Working with Children.....	21
3.2. Data Collection and Protection .....	22
3.3. Copyright and Publication of Results .....	23
Acknowledgements .....	25
References.....	Error! Bookmark not defined.

## List of Tables

Table 1. Document Information.....	2
Table 2. Project participants .....	9
Table 3. CREATING A SAFE SPACE.....	14
Table 4. CREATE AN INCLUSIVE WORK LIFE BALANCE.....	15
Table 5. CHALLENGING GENDER STEREOTYPES AND ACHIEVING EQUAL PARTICIPATION .....	16
Table 6. CONSIDERATIONS REGARDING WORKING WITH CHILDREN .....	21
Table 7. DATA COLLECTION AND PROTECTION .....	22
Table 8. COPY AND PUBLICATION OF RESULTS .....	23





# STEAMBRACE

## 1. INTRODUCTION

In this first part the Gender Balance and Ethics Strategy will be introduced and justified. The background of the plan for the project STEAMbrace, and project partners are presented. The strategy is divided into two parts: Gender Balance Plan, and Ethical Considerations.

In the Gender Balance Plan, STEAMbrace approach towards equality and gender balance is covered. While in the Ethical Considerations, we cover general ethical considerations regarding the progress of the project, participants, and contributors.

### 1.1. Gender Balance and Ethics Plan Introduction

Addressing the gender gap in STEM through innovative approaches like STEAM education is essential for fostering a more inclusive and equitable future. This project aims to bridge this gap by unlocking the potential of STEAM (STEM + Arts) education for future European innovators, especially women. By establishing a coordination alliance at the European level, we will develop numerous networking and educational activities that use creative thinking and scientific evidence-based approaches. These efforts will lead to broad, sustainable, and inclusive STEAM education methodologies that positively influence the transition towards cultural and social cohesion in Europe. Through a multi-actor approach, involving cultural and creative industries, and validation with 11-18-year-old students, we will better understand the gaps and limitations of current STEM education. Our comprehensive strategy includes a digital hub for participant networking, country-adapted training activities, a pilot STEAM week at the EU level, and follow-up training courses for educators. This project will extensively disseminate its findings and recommendations to ensure the adoption and scalability of successful STEAM practices across Europe, ultimately fostering a balanced representation in STEM fields and benefiting society as a whole.

Concluding this crucial "Gender Balance and Ethics Plan," it's paramount to underscore the profound significance of its creation. We have meticulously crafted this blueprint to address the glaring disparities in gender representation and ethical considerations within STEM fields. Recognizing the pivotal role of innovation in shaping our collective future, we are compelled to confront the systemic barriers that hinder equitable participation and hinder progress.

At the heart of our endeavor lies the conviction that achieving gender balance in STEM is not merely a matter of parity but a prerequisite for unleashing the full spectrum of human potential. By embracing innovative approaches such as STEAM education - integrating STEM with Arts - we chart a course towards a more inclusive and just society. This plan is not just a document; it's a manifesto for change, a declaration of our unwavering commitment to dismantling entrenched biases and fostering a culture of belonging.

Through the STEAM Alliance, our vision extends far beyond the confines of academia or industry; it encompasses the very fabric of our societal values. By embedding ethics at the core of our endeavors, we uphold the fundamental principles of fairness, integrity, and respect for human dignity. Through this plan, we endeavor to not only bridge the gender gap in STEM but to redefine the very essence of scientific inquiry and technological innovation.

In essence, this plan is a call to action, a rallying cry for all stakeholders to join forces in reshaping the landscape of STEM education and practice. It is a testament to our collective resolve to harness the transformative power of diversity and inclusion for the betterment of humanity. Together, let us embark on this journey towards a future where every individual, irrespective of gender or background, has the opportunity to contribute their unique talents and perspectives to the advancement of science and technology.

Within this document, you'll embark on a journey towards two crucial fronts: gender balance and ethical conduct within STEAM education. The "Gender Balance Plan" delves into the current landscape of gender representation in STEAM, highlighting statistics, barriers, and the imperative to foster inclusivity. You'll explore targeted strategies, from curriculum development to mentorship programs, all aimed at amplifying female participation. Through partnerships and sustainable practices, we aim not just to bridge gaps but to build lasting change.



Simultaneously, the "Ethics Plan" invites you into a realm where ethical considerations are paramount. Here, you'll encounter principles that underpin our approach, ensuring respect, fairness, and integrity in every endeavor. From informed consent protocols to privacy safeguards, every aspect is meticulously crafted to uphold the dignity and rights of all involved. As you navigate through monitoring mechanisms and conflict resolution frameworks, you'll witness our unwavering commitment to ethical conduct, driving us towards continuous improvement and accountability.

Together, these plans constitute not mere blueprints, but pledges to action. They represent our dedication to crafting a future where gender disparities dissolve, and ethical standards soar, paving the way for a more equitable and principled STEAM landscape. So, dive in, and let these pages illuminate the path towards a brighter, more inclusive tomorrow.

## 1.2. STEAMbrace project summary

STEAMbrace is an ambitious project aimed at addressing the gender gap in STEM (Science, Technology, Engineering, and Mathematics) fields by harnessing the potential of STEAM (STEM + Artistic approaches) education. By focusing on innovative educational strategies, the project seeks to empower future European innovators, particularly women, ensuring they play a pivotal role in the advancement of these critical fields.

To achieve this, STEAMbrace will establish a comprehensive coordination alliance at the European level, fostering collaboration across various sectors and countries. The project will develop a range of networking and educational activities that incorporate both creative thinking and scientific evidence-based methodologies. This dual approach is designed to create a STEAM education framework that is broad and sustainable - environmentally responsible, socially inclusive, and economically balanced. Additionally, the framework will be inclusive, addressing gender disparities as well as geodemographic and socio-economic diversity. The ultimate goal is to positively impact Europe's transition towards greater cultural and social cohesion.

The STEAMbrace project is driven by an EU interdisciplinary consortium that employs a multi-actor approach. This involves active collaboration with cultural and creative industries (CCIs), which are key drivers of innovative ecosystems. By integrating these industries with educational initiatives, the project aims to create a dynamic and inclusive learning environment.

A critical component of STEAMbrace is its focus on validation through engagement with students aged 11 to 18. This will help in identifying and addressing the gaps and limitations in current STEM education, taking into account various factors such as country, age, gender, and other socio-cultural aspects. By doing so, the project aims to foster a more sustainable, reproducible, and inclusive European STE(A)M education system.

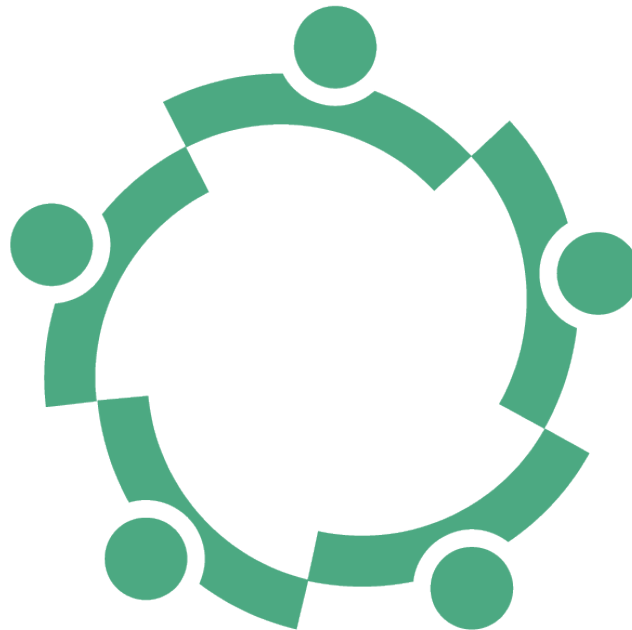
In summary, STEAMbrace is committed to creating a robust, inclusive, and dynamic STEAM education model that not only bridges the gender gap but also promotes broader societal benefits. Through interdisciplinary collaboration and innovative educational practices, the project will contribute to a more cohesive and forward-thinking Europe.



### 1.3. Partner Organizations

Table 2. Project participants

Project Participants					
No.	Role	Short name	Legal name	Country	PIC
1	COO	EDE	CASA EDELVIVES	ES	891640782
2	BEN	AIJU	ASOCIACION DE INVESTIGACION DE LA INDUSTRIA DEL JUGUETE CONEXAS Y AFINES	ES	999443090
3	BEN	WITEC	WITEC SWEDEN	SE	911813581
4	BEN	C4G	C4G – CONSULTING AND TRAINING NETWORK, LDA	PT	932044386
5	BEN	ACINV	ACADEMIA DE INVENTORES SL	ES	886766338
6	BEN	MTP	PROVINICA PROTUGUESA DA CONGREGACAO DOS IRMAOS MARISTAS	PT	889490195
7	BEN	CTA	CONTACTICIA SL	ES	957958033
8	BEN	ARTV	ASOCIATIA DE TINERET RAISE YOUR VOICE	RO	947187638
9	BEN	EFZG	SVEUCILISTE U ZAGREBU EKONOMSKI FAKULTET	HR	998755166
10	BEN	UPV/EHU	UNIVERSIDAD DEL PAIS VASCO/ EUSKAL HERRIKO UNIBERTSITATEA	ES	999865234



**STEAMBRACE**



# STEAMBRACE

## 2. GENDER BALANCE PLAN

### 2.1. Introduction to gender gap in STEM and STEAM

STEM fields are instrumental in enhancing the technological and innovative capabilities of the economy. Despite this, women remain underrepresented in the STEM workforce. Common explanations for these gender gaps include discrimination and socialization, leading to policies targeting these issues. However, evidence from behavioral sciences suggests that other factors also contribute to this disparity, such as differences in career and lifestyle preferences and cognitive aptitudes, which become more pronounced at higher levels of achievement. To address these complexities, diverse strategies have been implemented to boost women's preparedness and interest in STEM fields, including early exposure to academic and vocational STEM courses.

Gender equity and quality education are key Sustainable Development Goals, particularly in STEM undergraduate programs where a significant gender gap persists. Data from numerous studies show that only a small percentage of STEM students are women. Surveys indicate that inspiring faculty positively impact students' decisions to continue their STEM studies, while a competitive environment and unsympathetic teaching are negative factors. Educational innovations such as mentoring, digital platforms, faculty awareness workshops, and talks with successful women in STEM are proposed to support and retain female students.

Despite advancements in technology and educational equity, the gender gap in STEM fields remains significant. UNESCO reports from 2013 to 2017 highlight the persistent underrepresentation of women in research and publications, even in developed countries like Sweden, Finland, Switzerland, and the USA, which rank high in gender equality. This suggests that the issue may lie more with educational policies than socio-economic status. To address this, stakeholders must ensure gender-neutral education, with curricula free from bias and early

support for all genders in STEM. Encouraging girls to engage with technology, improving spatial memory, and removing classroom stereotypes are crucial steps. Reducing the gender gap in STEM could expand the workforce and boost the economy, particularly in the post-pandemic era. Identifying and addressing these gaps can lead to more balanced and inclusive STEM fields.

STEAM education, which integrates arts with science, technology, engineering, and mathematics, is gaining traction globally, particularly at higher educational levels. Recognizing its potential in early childhood education, it is crucial to avoid a gender-blind STEAM approach. Artistic approaches within STEAM can help recognize and transcend gendered norms, making learning more inclusive. Integrating the arts with STEM aims to inspire more students, especially girls, to pursue STEM careers by creating engaging, innovative learning experiences. STEAM education can challenge traditional norms, promoting new ways of thinking and learning that go beyond gender stereotypes, thus fostering creative and critical skills from an early age.

In one study, artistic approaches and design thinking in education showed significant benefits, particularly in addressing gender gaps in STEM fields. A 3-day design thinking workshop in Japan demonstrated that such interventions can substantially enhance female youths' interest in engineering, creative confidence, and positive perceptions of STEM. The workshop, based on a constructivist learning approach, also fostered empathy, pro-social behaviors, and broadened career outlooks. These findings suggest that integrating artistic approaches and design thinking into educational curricula can effectively boost female students' confidence and creativity, encouraging them to envision careers in STEM fields.

To effectively address the persistent gender gap in STEM, our project aims to leverage innovative STEAM education approaches, integrating arts with science and technology to create more engaging and inclusive learning experiences. By focusing on early exposure, curriculum development, mentorship, and the elimination of classroom stereotypes, we aspire to foster a supportive environment that encourages girls to pursue STEM careers. Through strategic partnerships, tailored educational activities, and continuous evaluation, we will work towards a more balanced and inclusive STEM landscape, ultimately enhancing the technological and innovative capacities of the economy and contributing to societal progress.

In the Gender Balance Plan section, we address the challenges of achieving gender equality by highlighting key indicators and guidelines from the EU, Horizon, and GAP III. We outline the project's perspective and goals, detailing our approach to key actions aimed at promoting gender balance. This includes implementation strategies and monitoring processes. We conclude by suggesting indicators to measure progress throughout the project's lifespan.



## 2.2. GENDER EQUALITY in EUROPE

“In all its activities, the Union shall aim to eliminate inequalities, and promote equality, between men and women.”

Article 8 of the Treaty on the Functioning of the European Union

Promoting equality between women and men is a mandate for the Union, embedded in all its activities as required by the Treaties. Gender equality is a fundamental EU value, a core right, and a key principle of the European Pillar of Social Rights. It defines our identity and is crucial for fostering an innovative, competitive, and thriving European economy. Achieving gender equality allows us to harness all our talent and diversity, essential in business, politics, and society. It leads to more jobs and higher productivity, a potential that must be realized as we navigate green and digital transitions and address demographic challenges.

Through STEAMbrace, our project dedicated to involving more women in science and innovation, we are committed to precise actions that initiate and implement change within partner organizations, promote it through the alliance, and set an example for Europe. Therefore, it is critical for us to create and adhere to guidelines in all our activities and events.

Using the Union's guidelines as our framework, we will define and reshape our Gender Balance Plan to meet our specific needs.

## 2.3. Challenges for Gender Equality

Under the Horizon program, the European Commission aims to address the following:

- Increased participation of women in research and innovation programs
- Improved integration of gender perspectives in research and innovation project content
- Enhanced involvement of EU widening countries in gender equality initiatives within research and innovation organizations
- Expanded gender equality policies in research and innovation to address intersections with other potential discrimination grounds such as ethnicity, disability, and sexual orientation

The European Commission is also committed to addressing the deep socio-economic challenges that pressure or prevent women from participating in the field of science and innovation. As part of this effort, the Union's Gender Equality Strategy aims to create a healthier environment for all genders in both life and work.

- Being free from violence and stereotypes
  - o Ending gender-based violence
  - o Challenging gender stereotypes
  - o Thriving in a gender-equal economy
- Closing gender gaps in the labour market
  - o Achieving equal participation across different sectors of the economy
  - o Addressing the gender pay and pension gap
  - o Closing the gender care gap
- Leading equally throughout society
  - o Achieving gender balance in decision-making and politics
- Gender mainstreaming and an intersectional perspective in EU policies
- Funding actions to make progress in gender equality in the EU

- Addressing gender equality and women's empowerment across the world

Achieving gender equality in the European Union is a shared responsibility that demands collaboration and action from all EU institutions, Member States, and EU agencies, in partnership with civil society, women's organizations, social partners, and the private sector. In alignment with this strategy, STEAMbrace's Gender Balance Plan serves as a guide for all partners to promote gender equality through three distinct areas:

- Within the organization and partnership
- In the co-design and selection of activities
- Throughout events, including congresses, STEAM WEEK, and the alliance

In the following sections, we will break down the Union's Gender Equality Strategy as it applies to each of these areas.

## 2.4. Safe Spaces and Work-Life Balance

### 2.4.1. Creating a safe space for all

Creating a safe space is essential for fostering effective collaboration, particularly for minority groups and those under social and economic pressure. Such an environment requires special attention to ensure it is free from hidden forms of violence that can arise in social situations. These include neglect, disrespectful behaviour, and other actions that can significantly discourage the participation of women and girls, especially in male-dominated environments. Ensuring a safe space helps to mitigate these issues and encourages active involvement from all participants.

Beyond protecting women and girls, it is crucial that all participants are able to enjoy their experiences in a safe and respectful setting. A safe space fosters mutual respect and inclusivity, promoting positive interactions and collaborative efforts. By prioritizing safety and respect, we create an environment where everyone feels valued and empowered to contribute, ultimately enhancing the overall success and productivity of any collaborative endeavour.



Table 3. CREATING A SAFE SPACE

CREATING A SAFE SPACE	
Active listening	<ul style="list-style-type: none"> <li>• Paying attention in a respectful way to what others have to say or share without pressuring them to share what they might be reluctant to share</li> </ul>
Open to all perspectives	<ul style="list-style-type: none"> <li>• All opinions are worthy of listening</li> <li>• All questions are good questions</li> <li>• One should respect others when they share their ideas and insights</li> <li>• Respect should be visible both in the saying and in the gestures</li> </ul>
Time management	<ul style="list-style-type: none"> <li>• All participants should find a proper time to talk or share their opinion</li> <li>• Participants should be encouraged to share but not pressured</li> </ul>
Safety and security	<ul style="list-style-type: none"> <li>• Participants should feel safe to share or not share</li> <li>• Listeners should be professional about what they hear and free from judgment</li> <li>• Everyone should be accountable for what they say</li> </ul>
Team management	<ul style="list-style-type: none"> <li>• Creating a professional environment out of stereotypes is essential</li> <li>• Team manager should try to keep offensive behaviour</li> <li>• Conflict management</li> </ul>

STEAMbrace aims to encourage more girls and women to participate in STEM and innovation fields. To achieve this, we recommend paying special attention to women in three key areas as mentioned before:

- Within the organization and partnership
- In the co-design and selection of activities
- Throughout events, including congresses, STEAM WEEK, and the alliance

By focusing on these areas, STEAMbrace seeks to create an inclusive environment that supports and empowers women to thrive in STEM and innovation. From this point forward, the challenges and proposed responses will be discussed within these areas.

### 2.4.2. Work life balance

Work-life balance is a key focus in EU guidelines. While it is often simply defined as maintaining a balance between work and family time or personal interests, a deeper examination reveals numerous societal issues, particularly for minorities and women. Cultural approaches to work-life balance can vary significantly from one country or region to another, but highlighting some common considerations is valuable for our purposes.

For instance, women and minorities often face unique challenges in achieving work-life balance due to systemic inequalities and societal expectations. These challenges can include unequal distribution of household responsibilities, lack of access to affordable childcare, and workplace cultures that do not support flexible working arrangements. By understanding and addressing these issues, we can promote a more inclusive and supportive environment that recognizes and respects the diverse needs of all individuals. This, in turn, helps create a healthier work-life balance for everyone, ultimately leading to greater productivity and well-being.

Table 4. CREATE AN INCLUSIVE WORK LIFE BALANCE

CREATE AN INCLUSIVE WORK LIFE BALANCE	
<i>Within the organization and partnership</i>	
Flexible Working Hour	<ul style="list-style-type: none"> <li>Ensuring that working hours are adaptable to accommodate family responsibilities and personal commitments</li> </ul>
Supportive Leadership	<ul style="list-style-type: none"> <li>Encouraging leaders to actively promote and model work-life balance</li> </ul>
Childcare Support	<ul style="list-style-type: none"> <li>Providing access to on-site childcare facilities or subsidies for external childcare</li> </ul>
After-Work Activities	<ul style="list-style-type: none"> <li>Considering the impact of after-work social events on those with family commitments and offering alternatives</li> </ul>
Mental Health Resources	<ul style="list-style-type: none"> <li>Offering support such as counselling services to help manage stress and mental health</li> </ul>
<i>In the Co-Design and Selection of Activities</i>	
Timing of Activities	<ul style="list-style-type: none"> <li>Scheduling meetings, training sessions, and other activities during times that are convenient for participants with family responsibilities</li> </ul>
Inclusive Decision-Making	<ul style="list-style-type: none"> <li>Ensuring that women are involved in the planning and decision-making process to reflect diverse needs</li> </ul>
Family-Friendly Events	<ul style="list-style-type: none"> <li>Designing activities that are inclusive of family participation or providing childcare during events</li> </ul>
Gender-Neutral Language	<ul style="list-style-type: none"> <li>Using inclusive language in all materials and communications to promote equality</li> </ul>
<i>Throughout Events, Including Congresses, STEAM WEEK, and the Alliance</i>	
Accommodation for Families	<ul style="list-style-type: none"> <li>Providing family-friendly accommodations and facilities at event venues</li> </ul>
Event Scheduling	<ul style="list-style-type: none"> <li>Avoiding late-night or weekend events that may conflict with family time</li> </ul>
Accessible Venues	<ul style="list-style-type: none"> <li>Ensuring venues are accessible to individuals with children, such as those with stroller access and nursing rooms</li> </ul>

By considering these aspects, organizations can create a more inclusive environment that supports work-life balance for all participants, especially women, and ensures their full engagement and participation

## 2.5. Challenging Gender Stereotypes and Achieving Equal Participation in STEAMbrace

Gender stereotypes and discrimination are significant barriers preventing women from participating fully in STEM and innovation fields, contributing to substantial economic and social disparities. These stereotypes perpetuate biases that discourage women from pursuing and advancing in STEM careers, ultimately limiting the diversity and potential of the workforce.

The primary aim of STEAMbrace is to bridge this gap by actively working to dismantle these barriers. To achieve this, we propose a series of key indicators to be monitored and evaluated throughout the project's duration, with particular emphasis on European-scale events. These indicators will help ensure that our efforts are effective and inclusive, promoting gender equality in STEM fields.

Table 5. CHALLENGING GENDER STEREOTYPES AND ACHIEVING EQUAL PARTICIPATION

CHALLENGING GENDER STEREOTYPES AND ACHIEVING EQUAL PARTICIPATION	
Partnership, management and leadership	
Meetings	<ul style="list-style-type: none"> <li>• A very well-balanced men/women participation</li> </ul>
Presentations	<ul style="list-style-type: none"> <li>• Preferably shared presentations</li> <li>• Giving more opportunities to women participation</li> </ul>
Decision making	<ul style="list-style-type: none"> <li>• Include gender perspective in decision making</li> <li>• Openly sharing considerations regarding social economical barriers prohibiting women participation</li> <li>• Consider gender perspective in scheduling and planning meetings and events</li> </ul>
Leadership	<ul style="list-style-type: none"> <li>• Collaborative environment for leadership</li> </ul>
Choosing and co-design of activities	
Choosing an activity	<ul style="list-style-type: none"> <li>• Activities should be chosen based on the criteria of STEAM with focus on Artistic Approaches</li> <li>• Prioritization of activities with the focus on encouraging girls in STEM</li> <li>• Prioritization of activities with focus on women participation in STEM</li> <li>• Prioritization of activities which fight against gender stereotypes</li> <li>• Prioritization of activities which focuses on the challenges for women</li> </ul>
Workshop holder	<ul style="list-style-type: none"> <li>• Activities run by women are on the focus</li> <li>• More than 50% of the activities chosen for STEAMbrace events should be held by women</li> <li>• More than 50% of the activities in any event should be held by women</li> <li>• At least one woman should be present in each team of activities</li> </ul>
Preparing the activity	<ul style="list-style-type: none"> <li>• In preparation of the activity to be presented or held in the events, gender stereotypes should be considered and fought against</li> <li>• In preparation of the activities to be presented or held in the events, women should be involved</li> <li>• In preparation of the activities to be presented or held in the events, preferably a gender consultant should be involved</li> </ul>
Co-design the activity	<ul style="list-style-type: none"> <li>• Co-design of any activities should be done in a balanced group of men and women</li> <li>• In co-design of activities, gender biases and stereotypes should be considered</li> <li>• In co-design and co-creation teams there should be a gender consultant, preferably</li> <li>• Looking through the lens of social and economic barriers should be a main consideration in any design and selection of activities</li> </ul>
Polishing the activity	<ul style="list-style-type: none"> <li>• The activity should not promote any gender stereotypes</li> <li>• The activity should be gender neutral</li> <li>• The activity should not be discouraging for others</li> <li>• The activities should emphasize on the equality</li> </ul>
STEAM Congress	
Leadership and holding the congress	<ul style="list-style-type: none"> <li>• Leading and driving the congress should be done by more than 50% of the leading community being women</li> </ul>
Partnership	<ul style="list-style-type: none"> <li>• Diversity is the key point for the congress</li> <li>• Partners should keep the gender balance when inviting or sending people to the congress</li> </ul>
Stakeholders	<ul style="list-style-type: none"> <li>• Stakeholders should be informed about the focus on women participation in STEM</li> <li>• Stakeholders should be loyal to this aim to encourage women participation</li> <li>• Diversity should be considered when inviting stakeholders</li> <li>• Stakeholders from disadvantaged groups, areas, regions should be involved</li> <li>• Stakeholders active in women rights, minority rights and activists should be encouraged to participate in the congress</li> </ul>
Keynote speakers	<ul style="list-style-type: none"> <li>• Keynote speakers should keep participation of women in STEM in focus</li> <li>• More than 50% of keynote speakers should be women</li> <li>• Groups should be well balanced</li> </ul>
Plenary talks	<ul style="list-style-type: none"> <li>• At least two out of four plenary talks should be led by women</li> </ul>
General discussion panel	<ul style="list-style-type: none"> <li>• Panels should be led by women or people who are well informed about women in STEM</li> </ul>
Focus groups	<ul style="list-style-type: none"> <li>• Groups should be well balanced</li> <li>• Diversity should be in focus when creating the groups</li> </ul>



	<ul style="list-style-type: none"> <li>• Facilitators should be well informed about women participation in STEM fields</li> </ul>
Activities	<ul style="list-style-type: none"> <li>• All the activities should be focused on engagement of female students</li> <li>• All the activities should be gender neutral when at the same time encourage female participation</li> <li>• Activities should be adapted for rural and disadvantaged areas</li> </ul>
Debates or round discussions	<ul style="list-style-type: none"> <li>• Diversity should be the main focus</li> </ul>
Poster section	<ul style="list-style-type: none"> <li>• Poster section should have women participation and achievements in focus</li> </ul>
Participants	<ul style="list-style-type: none"> <li>• Diversity and gender balance is in the focus</li> </ul>
Invited organizations	<ul style="list-style-type: none"> <li>• Schools should be encouraged to bring female students to the congress</li> <li>• Organizations should be encouraged to send female members to the co-design and co-creation of activities</li> <li>• Active organizations in women participation should be given chance to participate properly in the congress</li> <li>• Other organizations should be encouraged to take part in this future building congress for a more gender equal future</li> </ul>
<b>STEAM WEEK</b>	
Students	<ul style="list-style-type: none"> <li>• More than 50% of participant student should be girls</li> <li>• More than half of the participants in each team should be girls</li> </ul>
Staff	<ul style="list-style-type: none"> <li>• More than 50% of staff joining the activities should be women</li> </ul>
Gender consultant	<ul style="list-style-type: none"> <li>• All activities should be recognized for the equality and promotion of participation</li> <li>• No activities should carry gender stereotypes</li> <li>• A gender consultant should be present to approve the activities</li> <li>• Women should be involved and consulted for choosing activities</li> </ul>
<b>STEAM Alliance</b>	
Leadership	<ul style="list-style-type: none"> <li>• More than half of the leading committee should be women</li> <li>• Women should be given the chance to lead the alliance</li> </ul>
Membership	<ul style="list-style-type: none"> <li>• Members should be active to promote women participation in STEM and innovation</li> <li>• Members should actively support women for participation in STEM and innovation</li> <li>• Members should uphold to gender balance trainings within organization</li> <li>• Members should be active to answer the need to gender balance trainings</li> </ul>
Gender equality actions	<ul style="list-style-type: none"> <li>• Members should devote time and effort for gender equality plans and actions</li> <li>• Members should participate actively in gender equality trainings to inform their staff</li> <li>• Members should actively try to close the gender gap</li> </ul>



## 2.6. Addressing the Gender Pay Gap and Country Profile

The gender pay gap remains a significant issue across various fields, including STEM, impacting economic equity and social cohesion. STEAMbrace is committed to addressing this disparity by encouraging partner organizations to actively engage in identifying and mitigating gender pay gaps within their respective countries. In this part, we outline the steps and considerations for partner organizations to create a simple country profile that highlights the gender pay gap and proposes actionable strategies for improvement.

To create a country profile, partner organizations should begin by collecting and analyzing data related to the gender pay gap within their regions. This includes statistical data on average wages for men and women in STEM fields, employment rates, and any existing policies addressing wage disparities. Understanding the current landscape is crucial for identifying the root causes of the pay gap and developing targeted solutions.

For a country profile, it is essential to delve into the cultural, social, and economic factors that contribute to the gender pay gap. These factors can vary significantly between countries and even within different regions of the same country. By examining these influences, partner organizations can tailor their strategies to address specific barriers that women face in their local contexts. This analysis should also consider intersectional issues, such as the impact of ethnicity, disability, and socio-economic status on the gender pay gap.

To perform a successful project and lead the way for STEAMbrace partner organizations should engage with stakeholders, including government bodies, educational institutions, and industry leaders, to foster a collaborative approach to closing the gender pay gap. Through workshops, discussions, and policy advocacy, organizations raise awareness and drive collective action towards equitable pay practices. The best result would be achieved when the activities are aligned properly with the country profile.

The outline of the profile, which is presented below serves as a template, guiding organizations through the process of documenting and addressing the gender pay gap in their respective countries. The outline includes sections on data collection, cultural and economic analysis, and proposed strategies for closing the pay gap.

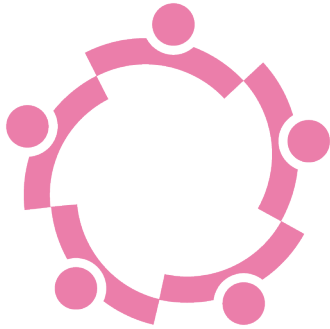
By actively addressing the gender pay gap and creating detailed country profiles, STEAMbrace partner organizations can contribute to a more equitable and inclusive STEM environment. These efforts will not only benefit women but also enhance the overall innovation and competitiveness of the STEM fields within their countries.

## 2.6.1. Outline for Country Profile

- Introduction
  - o Overview of the gender pay gap issue in the country
  - o Importance of addressing the pay gap in STEM fields
- Data Collection and Analysis
  - o Statistical data on wages and employment rates
  - o Existing policies and measures addressing the gender pay gap
- Cultural, Social, and Economic Factors
  - o Analysis of cultural and societal influences
  - o Impact of economic conditions on the pay gap
  - o Intersectional issues (e.g., ethnicity, disability, socio-economic status)
- Proposed Strategies
  - o Short-term and long-term goals for closing the gender pay gap
  - o Policy recommendations and best practices
  - o Monitoring and evaluation plans
- Conclusion
  - o Summary of key findings and proposed actions
  - o Call to action for continued efforts and collaboration

By following this outline and committing to the outlined steps, partner organizations can create robust country profiles that effectively address the gender pay gap and foster a more equitable future in STEM.





# STEAMBRACE

## 3. ETHICAL CONSIDERATIONS FOR STEAMbrace

Ethical considerations are a cornerstone of the STEAMbrace project, ensuring that our efforts to promote gender balance in STEM fields are conducted with integrity, respect, and responsibility. This section of the "Gender Balance and Ethics Plan" outlines the ethical guidelines and principles that will guide our work. These guidelines are crucial for maintaining trust and transparency with all stakeholders, including participants, partners, and the wider community.

The ethical framework for STEAMbrace is divided into three key categories:

- Working with children, which contains important safety considerations, both mental and physical.
- Data collection, in which we cover privacy and data protection, for example regarding interviews and analysis of other collected data
- Copyright and publication of results, which contains important considerations regarding interviews, co-creation of activities, commercializing the activities, articles and publications, and general results of the project

Each of these categories is vital to ensuring that our activities uphold the highest ethical standards.



### 3.1. Working with Children

Working with children requires special ethical considerations to protect their rights, well-being, and development. In all periods of the project, the following considerations regarding working with children should be kept in mind by all project partners and staff:

Table 6. CONSIDERATIONS REGARDING WORKING WITH CHILDREN

CONSIDERATIONS REGARDING WORKING WITH CHILDREN	
Informed Consent	<ul style="list-style-type: none"> <li>• We should provide correct and proper information about the participation of the children in the project.</li> <li>• We should ensure that parents or guardians provide informed consent for their children’s participation in STEAMbrace activities.</li> <li>• Children should be given age-appropriate information about the activities and their rights.</li> </ul>
Safety and Welfare	<ul style="list-style-type: none"> <li>• Implementing robust measures to ensure the physical and emotional safety of children during all project activities. This includes:               <ul style="list-style-type: none"> <li>• background checks for staff and volunteers,</li> <li>• safe physical environments,</li> <li>• and clear procedures for reporting and addressing concerns.</li> </ul> </li> </ul>
Confidentiality	<ul style="list-style-type: none"> <li>• Protecting the privacy of children by keeping personal information confidential.</li> <li>• Using pseudonyms or anonymized data in reports and publications.</li> </ul>
Traveling with Children	<ul style="list-style-type: none"> <li>• Clear guidelines should be established for travel involving children</li> <li>• Parental consent should be obtained</li> <li>• Transportation should be safe and appropriate</li> <li>• Adequate supervision should be provided</li> <li>• Adhering to all legal requirements regarding child travel is a certain obligation.</li> </ul>
Competitions	<ul style="list-style-type: none"> <li>• Competitions should be conducted fairly and transparently.</li> <li>• There should be appropriate measures to support the well-being of all participants</li> <li>• All the rules for competition should be clear</li> <li>• Support and encouragement should be provided and be constant</li> <li>• Recognizing the efforts and achievements of all participants should be the main focus, regardless of the outcome</li> </ul>



## 3.2. Data Collection and Protection

Ethical data collection and management are essential to protect the privacy and rights of participants. This section will outline key considerations to ensure compliance with ethical standards and regulations:

Table 7. DATA COLLECTION AND PROTECTION

DATA COLLECTION AND PROTECTION	
Privacy and Data Protection	<ul style="list-style-type: none"> <li>• Project partners and staff should adhere to DGPR and other relevant regulations to ensure that personal data is collected, stored, and processed securely</li> <li>• In all interviews, obtaining explicit consent for data collection and informing participants about how their data will be used and the measures taken to protect their privacy in necessary.</li> </ul>
Anonymity and Confidentiality	<ul style="list-style-type: none"> <li>• Data collected from participants, especially during interviews, should be anonymized to protect their identity.</li> <li>• Clear protocols should be established for handling and storing data to prevent unauthorized access</li> <li>• Using pseudonyms and removing identifying information from transcripts and reports should be main concerns</li> </ul>
Informed Consent for Interviews	<ul style="list-style-type: none"> <li>• Participants should fully understand the purpose of the interviews</li> <li>• Clear information should be provided to participants for how their information will be used</li> <li>• Participants keep the right to withdraw at any time without penalty</li> <li>• The withdrawal could happen at anytime before, during, or after the data collection, analysing, and even after publishing any results</li> <li>• Participants should be provided with detailed information and have the opportunity to ask questions before consenting</li> <li>• Participants should be well informed how to track the project, the results, and the exact usage of the data collected from them at anytime</li> </ul>
Ownership of Data	<ul style="list-style-type: none"> <li>• Defining the ownership of data collected from interviews should be clear</li> <li>• Participants should be informed about who owns the data and how it may be used</li> <li>• All the rights they have should be outlined regarding access to their data and the ability to request its deletion.</li> </ul>
Use and Interpretation of Data	<ul style="list-style-type: none"> <li>• Clear outline for how the data will be used and interpreted should be provided</li> <li>• This includes specifying the purposes for which the data will be used, ensuring that interpretations are accurate and respect the context of the information provided</li> <li>• Transparency in data analysis and reporting is essential to maintain trust and integrity</li> </ul>

By adhering to these guidelines, STEAMbrace commits to ethical data management practices that respect the rights and dignity of all participants, ensuring that data is handled responsibly and transparently.

### 3.3. Copyright and Publication of Results

Intellectual property and publication ethics are crucial for respecting the contributions of all participants and collaborators in the STEAMbrace project. In this section outlines are provided regarding the ethical considerations and guidelines for various types of outputs and activities.

The following table reflects on the guideline for three key categories:

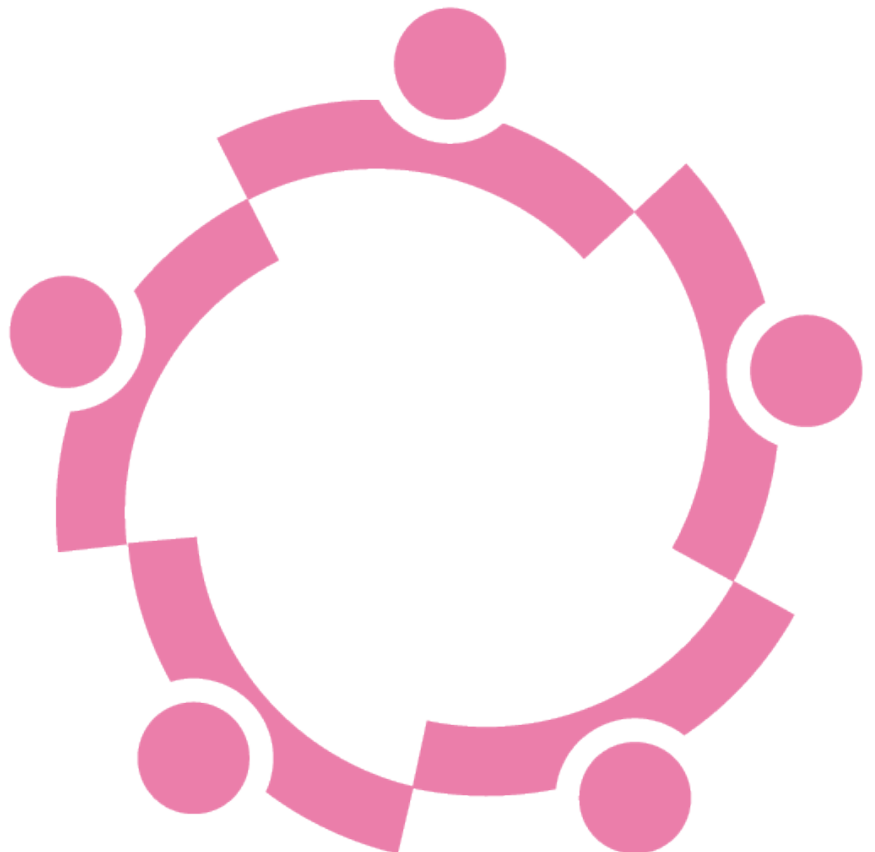
- Reports and Publications: In STEAMbrace a variety of reports and publications will be produced throughout the project, some of which will be sensitive while others will be open to the public. In both, copyright and data protection and privacy should be handled correctly. However, there is a heavier responsibility regarding to the reports and articles open to public.
- Co-Creation of Activities: STEAMbrace invites individuals and organizations to co-create activities for STEAM Week and the Congress. Recognition of the ownership of the activities and copyright is the key feature for a successful collaboration.
- Ethical considerations about talks, discussions, focus groups, and speeches
- Results of the Project: Most project results will be openly accessible to promote transparency and the sharing of knowledge. This feature of the project obliged the partner organizations to be more careful about the contents they are including in the results.

Table 8. COPYRIGHT AND PUBLICATION OF RESULTS

COPYRIGHT AND PUBLICATION OF RESULTS	
<b>Reports and Publications</b>	
Acknowledgment of Contributors	<ul style="list-style-type: none"> <li>• All contributors to articles and reports should be appropriately credited for their work</li> </ul>
Sensitive Reports	<ul style="list-style-type: none"> <li>• Public access should be provided to reports and publications that are designated as open to all</li> <li>• Transparency and the dissemination of knowledge should be applied</li> </ul>
<b>Co-Creation of Activities</b>	
Clear Ownership	<ul style="list-style-type: none"> <li>• The ownership of co-created activities should be clearly defined</li> <li>• All contributors should clearly understand their rights and responsibilities</li> </ul>
Acknowledgment of Contributions	<ul style="list-style-type: none"> <li>• All contributions to co-created activities will be recognized and documented</li> </ul>
Commercialization	<ul style="list-style-type: none"> <li>• The STEAMbrace project can not claim ownership of co-created activities</li> <li>• However, partner organizations may commercialize these activities with the agreement of all contributors involved</li> </ul>
<b>Talks, Discussions, Focus Groups, and Speeches</b>	
Informed Consent	<ul style="list-style-type: none"> <li>• Participants must be informed about the purpose of their involvement and consent to the use of their contributions</li> <li>• Participants should be informed if any use of or refer to the talks and discussions takes place</li> </ul>
Privacy and Anonymity	<ul style="list-style-type: none"> <li>• Protecting the privacy and anonymity of participants in all recorded or documented discussions</li> </ul>
Respectful Engagement	<ul style="list-style-type: none"> <li>• A respectful and inclusive environment where all participants feel valued and heard should be top priority</li> </ul>
<b>Results of the Project</b>	
Informed Inclusion	<ul style="list-style-type: none"> <li>• Contributors should be informed and consent to the inclusion of their activities or outputs in the final results</li> </ul>
Respecting Ownership	<ul style="list-style-type: none"> <li>• Respecting the ownership rights of contributors and not including activities or outputs if the owner objects</li> </ul>

Transparency and Fair Use	<ul style="list-style-type: none"> <li>• The use of results should be clearly outlined</li> <li>• The results should be presented fairly and transparently</li> </ul>
<b>Social Media</b>	
General	<ul style="list-style-type: none"> <li>• Staff should always obtain explicit consent before posting any photos, videos, or personal information about individuals involved in the project</li> <li>• By individuals we mean participants, collaborators, and partners</li> <li>• If sharing stories or results that include personal experiences or sensitive information, anonymize the content to protect the identities of those involved</li> <li>• Use of appropriate privacy settings to control who can see and interact with the posts are among project responsibilities</li> <li>• Extra caution should be considered regarding sharing sensitive information on public platforms</li> </ul>
Pictures	<ul style="list-style-type: none"> <li>• Use of any information, picture, quotes, should be by the consent of the owner</li> <li>• Participants should be informed if they are subject to photography</li> <li>• There should be clear guidelines for the photographers to respect the rights of people to not to be photographed</li> </ul>

By adhering to these guidelines, STEAMbrace commits to fostering an ethical environment that respects the rights and dignity of all participants and stakeholders, while promoting transparency, accountability, and fairness in all its activities.





## Acknowledgements

This document would be the first version of the Ethics and Gender Balance Plan. The Second and final version would be revised and ready by the end of the project – month 36. All the information would be completed by then, acknowledgements, references, and all contributors would be recognized.

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