Intermediary Report

UNESCO *Gender and STEM Education in Romania Project*

UNESCO Program: *Revitalizing STEM Education to Equip Future Generations with STEM Competency in South-East Europe and the Mediterranean*, supported by Huawei Technologies

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I. Introduction

Respecting the *Gender and STEM Education in Romania* ("GENSTEMED") project Terms of Reference, the present *Intermediary Report* is submitted by the *Digital Leadership Institute* in fulfillment of the second project deliverable with Project Reference *IO4* (Intellectual Output number *IO4*), which includes first findings from the Desk Research, Online Surveys and Interview Questionnaires from the project, as captured in the following report **Sections**:

1. Context and Background
2. Scope and Limitations of the Analysis
3. Guiding Questions for the Analysis
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II. Context and Background

The present section provides a high-level context for the discussion on “Gender and STEM Education in Romania” including a review of the state-of-the-art in research on this subject, key characteristics related to the topic, and facets of the wider context including factors impacting "STEM Education in Romania” more broadly.

A. Background

The “Gender and STEM Education” landscape in Romania reflects a complex interplay of achievements and ongoing challenges. The country boasts a higher-than-average representation of women in certain STEM fields, especially Technology. At the same time, systemic issues persist across the educational and professional spectrum, as captured in the so-called “leaky pipeline” phenomenon.

1) Defining Characteristics

The narrative on "Gender and STEM Education” in Romania captures both progress and persistent challenges. With women representing 26% of ICT specialists—well above the EU average of 19%—the country is celebrated for its relative success in digital technology fields [1]. Additionally, women constitute 42.5% of tertiary graduates in STEM, surpassing the EU average of 32.8% [2]. However, this success is concentrated in ICT and natural sciences, leaving significant gender disparities in fields like engineering and physical sciences. Rural and suburban regions also remain underserved, reflecting systemic disparities in access to quality STEM education and professional opportunities [3]. While the Strategic Initiative for Digitization of Education (2021-2027) aims to address these gaps, targeted measures are needed to ensure equity across disciplines and geographies.

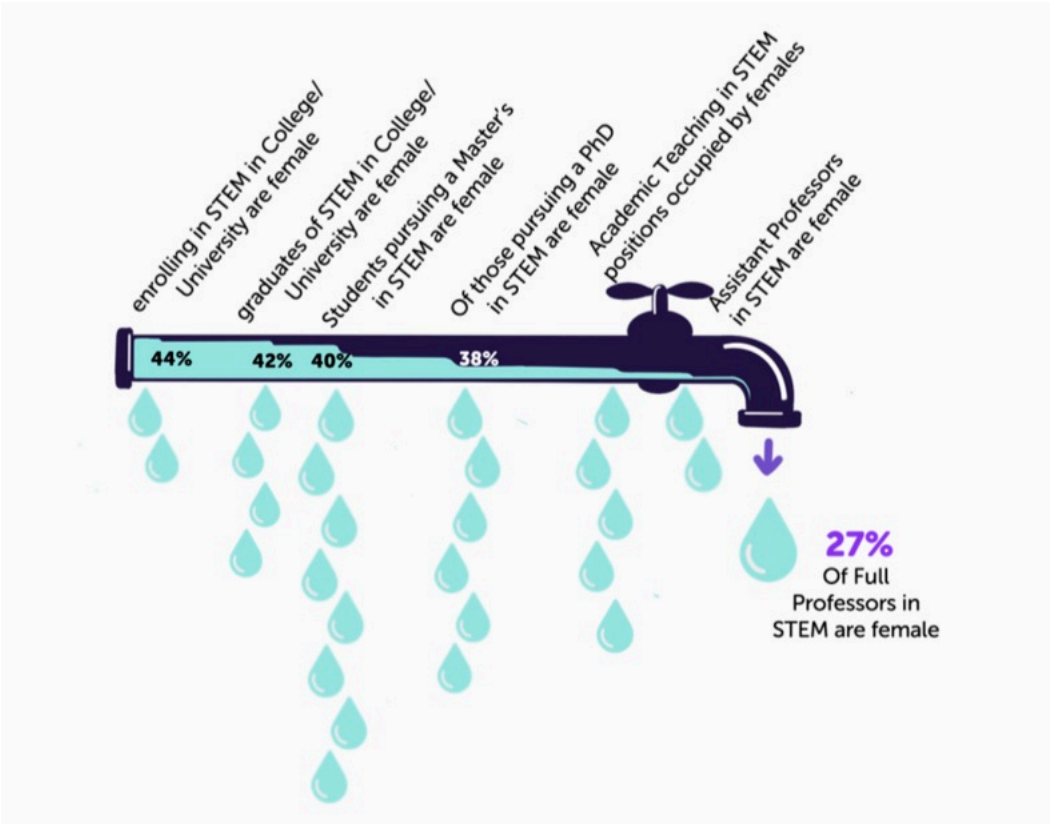


Figure 1: The Leaky Pipeline in Canada - Statistics Canada

2) Leadership
Exceptional performance in ICT positions Romania as a regional and European leader in gender representation in STEM. Strong participation of women in this field stems from a combination of structural and cultural factors: Historical investments in technical education, the influence of a competitive ICT outsourcing industry, and societal openness to women in technology roles [4]. Urban hubs such as Bucharest and Cluj play a pivotal role in nurturing this ecosystem, providing accessible pathways to education and employment. These achievements highlight Romania as a compelling case study for understanding how gender equity in STEM domain can be cultivated and expanded. The underlying factors that enable this success—such as technical curricula, supportive industries, and cultural dynamics—make Romania's experience particularly relevant for broader discussions about improving gender equity across STEM.

3) Paradox
Despite its strengths in ICT, Romania also illustrates a paradox of uneven gender participation across STEM. Women's representation drops sharply in fields like Engineering and physical Sciences, where systemic biases and cultural expectations create significant barriers to entry and retention [5]. Furthermore, the "leaky pipeline" phenomenon sees women exiting STEM at various stages, from Education to Workforce Participation and Leadership. Romania's success in ICT raises critical questions: Can these achievements be sustained without broader reforms, or are they tied to unique economic and cultural conditions? Will progress in ICT spill over into other STEM disciplines, or will these fields continue to lag behind? Addressing these paradoxes will require targeted interventions across education, workplace environments, and leadership pathways [6].

B. State-of-the-Art
In order to contribute context for the the project's Research Activities, an overview of the State-of-the-Art regarding the topic of "Gender and STEM Education in Romania," derived from the project's desk research, is included in the present section.

1) Girls in STEM
Romania leads the European Union with 42.5% of its tertiary graduates in STEM fields being women, a figure that surpasses the EU average of 32.8% [7]. The country also excels in ICT, where women represent 26% of specialists, outperforming the EU average of 19% [8]. These achievements highlight Romania's relative success in encouraging women to pursue STEM education, particularly in natural sciences and technology.

However, standardized assessments reveal persistent performance gaps that emerge early in education. TIMSS 2019 data shows that Romanian eighth-grade boys scored, on average, 14 points higher than girls in Mathematics, while PISA 2018 found a 7-point gap favoring boys in Science literacy [9][10]. These disparities suggest that, despite higher enrollment rates, performance gaps may influence women's confidence and their likelihood of pursuing fields that have a high mathematics focus, like Engineering and Physical Sciences.

2) Women in STEM
Romania's ICT sector offers a positive example of women's representation, with 26% of professionals in the field being women, placing it among the highest in the EU and ahead of countries like Germany (17%) [11][12]. This success is bolstered by thriving ICT hubs in cities like Bucharest and Cluj, which provide accessible career pathways for women. Romania also performs slightly better than the Southeastern Europe average in engineering careers, where gender representation remains a broader regional challenge.

Despite these strengths, the overall transition of Romanian women from STEM education to careers is limited. Only 1% of Romanian women hold STEM qualifications, and fewer than one

in a thousand secure STEM-related jobs [13]. Furthermore, Eurostat data reveals that women comprise just 19% of engineers, highlighting significant gaps across technical careers[14].

3) Women in STEM Leadership
Romania's ICT leadership provides a rare bright spot, with women occupying approximately 15% of leadership roles in the sector, higher than in France (10%) and Italy (9%) [15][16]. This progress reflects the country's broader emphasis on technical education and its growing startup ecosystem in urban areas. Romania's leadership performance is comparable to the Southeastern Europe average and reflects gradual improvements in ICT-specific initiatives. However, gender disparities remain pronounced in other STEM leadership roles. Women hold just 11% of leadership positions across STEM industries, and only 22% of full professors in STEM disciplines are women [17][18]. At the Polytechnic University of Bucharest, women account for just 15% of Engineering faculty, indicating persistent barriers to senior academic and industrial roles[19].

4) Women in STEM Entrepreneurship
Romania's ICT sector again provides a positive example, with a relatively high proportion of women-led startups compared to other STEM disciplines. In 2021, women-led ICT startups accounted for 12% of total venture capital funding, surpassing averages in Southeastern Europe [20][21]. The Women's STEM Network in Romania has also fostered platforms for female entrepreneurs to showcase their innovations and connect with industry leaders.
However, significant gaps persist. Across all STEM disciplines, women lead only 8% of startups, highlighting a lack of financial support and mentorship opportunities [22]. This figure aligns with trends in Southeastern Europe but falls well below the global average for women-led startups in technology sectors.

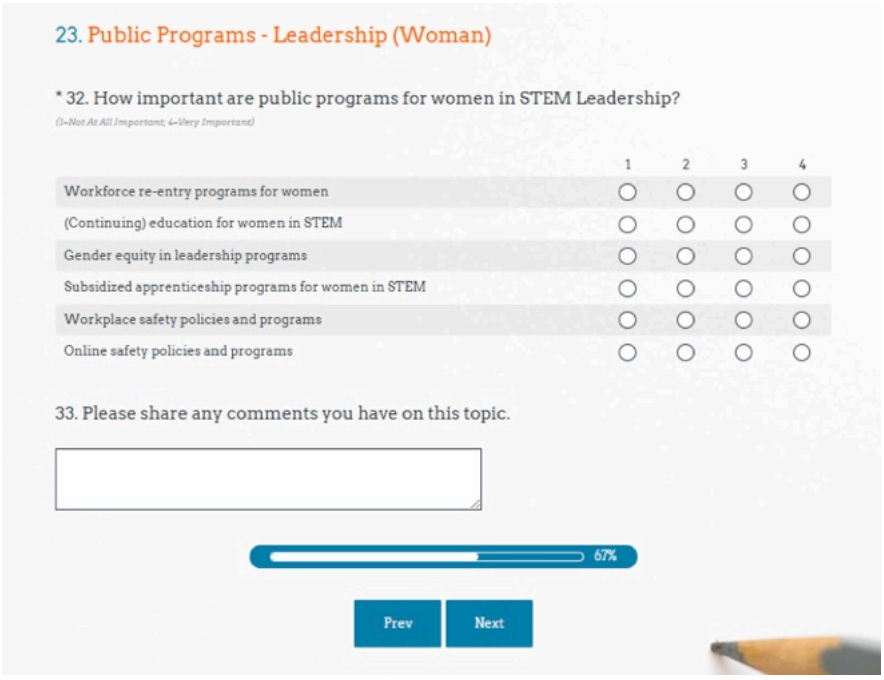


Figure 2: GENSTEMED Survey Question: Public Programs - Leadership (Women)

5) Women in STEM Research and Academia
Romania performs relatively well in ensuring equal opportunities for women at the doctoral level, where they account for 47% of students, comparable to countries like Poland and Croatia [23]. This parity at the graduate level reflects Romania's commitment to gender inclusivity in higher

education. However, this success does not translate to senior research careers, where women represent just 28% of senior researchers and only 15% of principal investigators in Engineering and Technology [24][25]. These figures align with Eastern Europe's averages but fall short of countries like Sweden, where women account for 37% of senior research roles.

C. Wider Context

The question of "Gender and STEM Education in Romania" cannot be examined independent from the wider context which informs this subject including key factors highlighted below.

1) Economic Constraints

Romania's broader economic context, including austerity policies and limited national budgets, directly impacts public education funding. Economic recessions have historically led to cuts in teacher salaries, reduced investments in educational infrastructure, and delayed curriculum updates. This context frames the ongoing funding issues raised in the next section.

2) Rural-Urban Divide

Significant disparities exist between urban and rural schools in Romania. Rural students face limited access to technology, internet, and modern learning facilities. This divide affects both student outcomes and the ability to attract qualified STEM teachers to underserved areas. This is a crucial component of the teacher shortage highlighted in the next section.

3) Cultural Attitudes

Cultural norms and student perceptions of STEM careers influence student engagement in STEM education. Societal beliefs about gender roles, for instance, impact the participation of female students in STEM-related fields. Awareness campaigns to address stereotypes could be part of a broader solution.

4) Emigration

Emigration, or the so-called "brain drain", is a significant challenge affecting STEM education in Romania, as many of the country's most talented graduates seek higher-paying opportunities abroad. This exodus is driven by low wages, limited research funding, and a perceived lack of career advancement opportunities in Romania. According to the 2023 Programme for International Student Assessment [26] and the Trends in International Mathematics and Science Study [27], Romanian students perform well in international STEM assessments, but many of these high-achieving students choose to study or work abroad. This migration of skilled talent weakens the national STEM workforce and deprives the country of innovators who could contribute to the local economy. Addressing this issue requires stronger retention policies, increased wages, and better incentives for Romanian graduates to remain in the country.

D. STEM Education Challenges

As concerns "STEM Education," the challenges facing Romania, that are highlighted in this section and are not unique in Southeastern Europe, should also be kept in mind.

1) Resource Constraints

One of the most pressing challenges in STEM education in Romania is inadequate funding, which directly impacts infrastructure, access to technology, and teaching resources. Schools in rural areas are particularly affected, with limited access to laboratories, modern equipment, and internet connectivity. According to a 2022 report by the European Commission, over 30% of Romanian schools still lack basic digital infrastructure, placing students at a significant disadvantage compared to their European peers [28]. The absence of sustained financial investment has also led to outdated curricula that fail to incorporate current STEM advancements, thereby diminishing student preparedness for modern STEM careers.

2) STEM Teacher Shortage
Another critical issue is the shortage of qualified and experienced STEM educators. Many teachers lack specialized training in STEM disciplines, and low salaries discourage potential candidates from entering the profession. This issue is exacerbated in rural regions, where teacher turnover is high, and recruitment efforts are insufficient. A 2023 report from UNICEF Romania highlighted that only 60% of STEM teachers in rural areas have received formal training in digital education tools, which significantly hinders their ability to teach technical subjects effectively [29]. This shortage contributes to inconsistent learning outcomes across the country, particularly in subjects like computer science and engineering.

Additionally, the declining number of STEM teachers across all levels of education poses a serious risk to Romania's STEM education system. Low wages, limited career progression, and the increasing demands of digital education have discouraged new graduates from pursuing teaching careers in STEM. Data from the 2023 Programme for International Student Assessment [30] and the Trends in International Mathematics and Science Study [31] indicate that Romania faces one of the highest teacher attrition rates in Eastern Europe. As experienced educators leave the profession, the reliance on underqualified or temporary staff increases, jeopardizing the quality of STEM education and negatively impacting student performance in science, technology, engineering, and mathematics. Addressing this issue requires policy reforms, increased teacher salaries, and stronger professional development programs to attract and retain skilled educators.

3) Declining Student Engagement
Student interest and engagement in STEM subjects remain low, leading to poor academic performance and reduced enrollment in advanced STEM courses. Factors contributing to this challenge include outdated curricula, traditional teaching methods, and a lack of project-based learning opportunities. A recent survey by the Romanian Ministry of Education (2023) found that 45% of high school students viewed STEM subjects as "difficult" or "not relevant" to their future careers [32]. This perception is fueled by insufficient exposure to practical, real-world applications of STEM concepts. Initiatives like coding bootcamps and robotics competitions have shown promise, but they remain limited in scope and accessibility.

4) Education and Labor Market Mismatch
Romania's STEM education system faces a gap between educational outcomes and labor market demands. Employers report a shortage of graduates with technical skills in high-demand sectors such as information technology, engineering, and data science. Outdated curricula, a lack of industry partnerships, and limited exposure to internships exacerbate this skills mismatch [33][34]. Companies often seek to recruit STEM professionals from abroad, further exposing weaknesses in the local education-to-employment pipeline. Bridging this gap will require closer collaboration between educational institutions, the private sector, and government policymakers.

III. Scope and Limitations of the Analysis

As outlined in the project proposal, Research Activities of the Gender and STEM Education in Romania project aim to better understand practices that influence Romania's position as a global leader in Gender and STEM, as observed in its relatively high level of representation of women as researchers and industry practitioners in STEM fields, particularly in Technology. By examining systemic barriers and enablers, the project seeks to uncover the lived experiences of STEM practitioners, educators, students, and ecosystem actors, thus contributing to the regional and global body of knowledge on practices that positively impact gender equity in STEM.

Category & Subcategories	Question	Answer Options	Validate	Probes
Girls in STEM	16. Rank these factors by how important they are for girls in STEM.	Cultural cues	Q1: Probe Two top-ranked answers.	You ranked 111 and 222 as most important. Please explain why.
		Community Support		
		Public programs for girls in STEM		
		A girl's own beliefs		
		Private initiatiaves for girls in STEM		
		Family support		
			Q2 & Q3: Probe Q1 Ranking 111 and 222, selected from among 6 Gray Options below	
A Girl's Own Beliefs	17. How important are a girl's own beliefs for girls in STEM?	Belief that STEM careers are well paid	Option 1 - Probe "Very Important" (#4) Answers	You rated OOO as "Very Important". Please explain why.
	(1=Not At All Important; 4=Very Important)	Belief that STEM is challenging		
		Belief that STEM careers are exciting		
		Belief that girls can do valuable things with STEM		
		Belief that girls are good at STEM		
Family Factors (Girl)	18. How important is family support for girls in STEM?	Mother works in STEM	Option 2 - Probe "Very Important" (#4) Answers	You rated OOO as "Very Important". Please explain why.
	(1=Not At All Important; 4=Very Important)	Support from parents/guardians		
		Other relative works in STEM		
		Support from other family members		
		Father works in STEM		
Community Support (Girl)	19. How important is community support for girls in STEM?	Support from teachers	Option 3 - Probe "Very Important" (#4) Answers	You rated OOO as "Very Important". Please explain why.
	(1=Not At All Important; 4=Very Important)	Inspiring role models		
		Attitudes of peers/ other students		
		Extracurricular groups (clubs, associations, civic		
		School STEM Programs		
Cultural Cues (Girl)	20. How important are cultural cues for girls in STEM?	Attitude that "Girls are good at STEM"	Option 4 - Probe "Very Important" (#4) Answers	You rated OOO as "Very Important". Please explain why.
	(1=Not At All Important; 4=Very Important)	Attitude that "STEM is for girls"		
		Positive and frequent media portrayal of girls and		

Table 1: GENSTEMED Interview Questionnaire (Excerpt)

A. Scope of the Analysis

The Research Activities in the project focus on key stages of the Leaky Pipeline and the gender disparities in STEM studies and careers represented by the respective "leaks." Guided by preliminary research and the **Circles of Influence Framework**, the scope of project research includes the following:

1) Primary and Secondary Education

This area is included in the scope of the project's Research Activities because gender biases shape girls' confidence and interest in STEM. Noted TIMSS and PISA data reveal performance gaps in Mathematics and Science, linked to societal expectations and parental influence, are echoed by survey findings.

2) Tertiary Education

At this level, gender disparities are most visible in fields like Engineering and physical Sciences. Women are better represented in ICT and life sciences but remain significantly underrepresented in physics and mechanical engineering. As such, this area is also in the scope of research.

3) STEM Careers

Transitioning from education to careers highlights barriers such as workplace culture, limited mentorship, and stereotypes. Urban-rural disparities are notable, with rural respondents

reporting fewer STEM opportunities. These subjects are therefore also explicitly in the scope of project Research Activities.

4) Leadership and Entrepreneurship
Women hold just 15% of leadership roles and lead only 8% of STEM startups, underscoring systemic challenges in access to funding and advancement, and therefore research on this topic is also included in the project.

B. Limitations of the Analysis
Despite the comprehensive approach outlined above, the analysis is subject to several constraints, included below.

1) Data Availability
Disaggregated data on gender and STEM participation in Romania may be incomplete or inaccessible. While PISA and TIMSS datasets provide valuable insights, delays in availability may necessitate reliance on older or proxy datasets, limiting the timeliness of conclusions.

2) Cultural and Contextual Sensitivities
Gender issues are deeply rooted in cultural norms and societal structures, which may not be uniformly documented or easily captured in quantitative datasets. The planned interviews aim to mitigate this limitation but may only partially represent diverse perspectives.

3) Complexity of Measurement
While participation rates are measurable, other critical factors such as “engagement,” “confidence,” and “perceptions” of STEM among girls and women are more challenging to quantify. The surveys attempt to address these through perception-based questions, but capturing the full nuance requires qualitative inputs.

4) External Influences
Broader societal factors, such as economic inequality and urban-rural divides, have significant indirect impacts on gender equity in STEM. These are integral to the analysis but may fall outside the specific scope of this gender-focused project.

5) Evolving Policy Landscape
Romania’s education reforms are dynamic, and insights drawn from previous evaluations may not fully reflect recent developments. This could affect the applicability of findings to the current policy environment.

IV. Guiding Questions for the Analysis

Research Activities in the project are structured around **Guiding Questions** which, aligned with the **Circles of Influence Framework** described in next section, are designed to explore systemic, individual, and societal influences on participation of girls and women in STEM in Romania. These questions allow for a nuanced understanding of systemic, individual, and societal factors that influence gender equitable participation in STEM fields in Romania. They ensure alignment with the project's objectives, and ideally will help provide a basis for identifying actionable strategies to address gender disparities. The noted questions are supplemented by targeted sub-questions that support analysis of specific **thematic areas** in the Surveys and Interviews which are again related to the project objectives and the **Circles of Influence Framework**. Guiding questions for analysis in the project are captured below.

1) What practices in Romania contribute to the relatively high participation of girls and women in STEM studies and careers, especially Technology/ICT?

This question seeks to identify and analyze the enablers of gender equity in STEM, particularly in ICT, where Romania demonstrates regional and global leadership.

- **Sub-question 1:** How do individual aspirations and confidence (Self) influence participation in STEM fields?
- **Sub-question 2:** What role do family support and role models (Family) play in fostering interest and persistence in STEM?
- **Sub-question 3**: How do community networks, peer influence, and school-level resources (Community) contribute to STEM engagement?

2) Which of the noted practices address Education and Studies, including life-long learning and informal education?

This question explores educational pathways and interventions that support gender equity across formal and informal education systems.

- **Sub-question 1:** How do societal attitudes and media representation (Society) impact girls' and women's access to and interest in STEM education?
- **Sub-question 2:** What systemic barriers or enablers in schools and universities (Power Centers) affect gender participation in STEM studies?
- **Sub-question 3:** How do urban-rural disparities and broader cultural contexts shape opportunities for STEM engagement?

3) Which of these practices address STEM Careers, including Leadership, and in Entrepreneurship and Research/Academia?

This question focuses on transitions from education to employment and leadership roles in STEM fields.

- **Sub-question 1:** How do mentorship and workplace culture (Power Centers) influence women's career trajectories in STEM?
- **Sub-question 2:** What factors enable or hinder women's representation in STEM leadership and entrepreneurial ventures (Cultural Context)?
- **Sub-question 3:** How do economic policies and institutional frameworks support or limit women's participation in STEM research and academia (Society and Power Centers)?

V. Angle of Analysis

As noted, Research Activities take advantage of the "**Circles of Influence" Framework** ("CIF") generated within the project in order to examine factors impacting the "Leaky Pipeline" phenomenon across six nested levels, starting from the perspective of the individual girl or woman herself, and expanding out to include all possible actors and other influences which may impact her decision to (continue to) participate in STEM fields.

A. Methodology

The Circles of Influence Framework serves as a conceptual foundation for the survey and interview activities in the project which links back to the project Research Methodology shared in the Preliminary Report. The CIF illustrates the various layers of influence impacting participation of girls and women in STEM fields, and provides a rationale for including multiple actors and domains in project research like those targeted with the Surveys and interview Questionnaires.

B. Circles of Influence Framework ("CIF")

The Circles of Influence Framework developed in the project highlights phenomena (e.g., role models, societal attitudes, funding policies) which may be observed by the targets of the project's Research Activities, i.e. Survey and Interview respondents. These also align with the "Leaky Pipeline" concept and offer a structured way to analyze gender gaps and retention in STEM, where specific survey and interview results within each circle may eventually be tied to measurable outcomes that can be further investigated and acted upon.

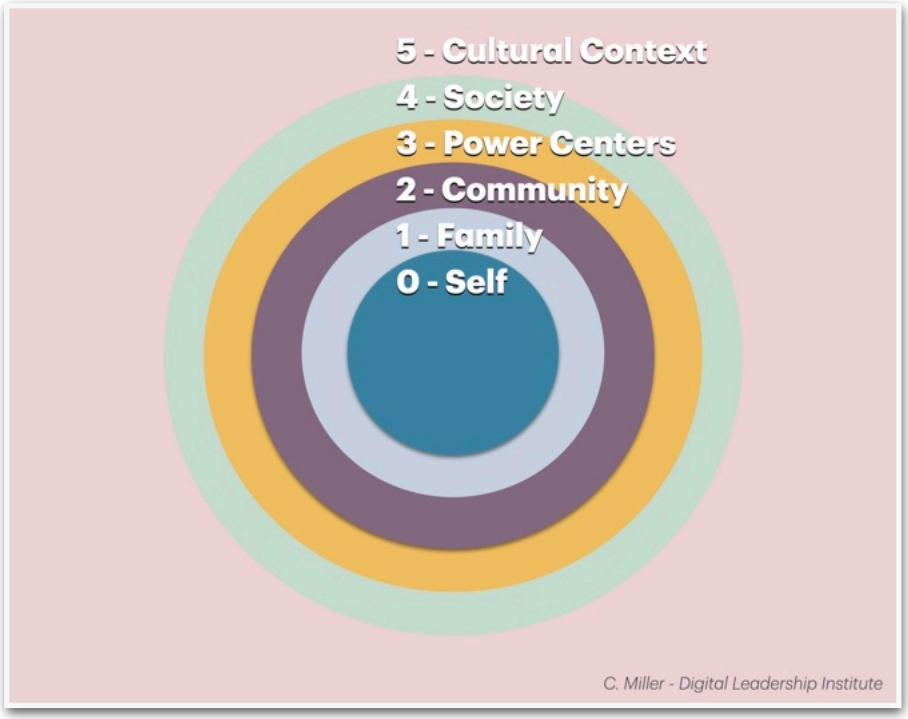


Figure 3: Circles of Influence Framework - DLI

1) Key Themes and Topics

Consistent with qualitative research aspect of the Methodology employed in the project, Research Activities are organized around **Key Themes and Topics** that emerge in the questions and responses to the Surveys and Interviews. These themes provide a structured way to group findings and insights while highlighting layered influences on gender equitable

participation in STEM. These topics can also be viewed through the Circles of Influence Framework and in this way, the CIF can provide a lens through which to explore, understand and tackle Themes and Topics influencing gender disparities in STEM in Romania and beyond.

2) Circles of Influence

Using the Circles of Influence Framework, lines of inquiry in the project are grouped in a way which aims to help deliver actionable insights from Research Activities that can subsequently be showcased, and ideally, replicated and scaled beyond the project. Where useful, Key Themes and Topics from Research Activities can be considered in the context of the Circles of Influence which are described further below.

a) *Self: Individual Aspirations and Confidence* - This Circle of Influence captures themes which reflect personal motivations, interest in STEM subjects, and self-perception of abilities. Survey questions addressed students' and professionals' confidence in STEM-related tasks and their aspirations for STEM careers. Interviews aim to delve deeper into how societal expectations and early educational experiences shape these perceptions.

b) Family Circle: Family and Role Models **-** Family support and exposure to STEM role models are critical factors influencing participation in STEM. Survey questions examined parental expectations, encouragement to pursue STEM education, and the presence of STEM professionals in respondents' immediate networks. Interviews aim to explore how these influences differ between genders and contribute to career choices.

c) Community Circle: Educational Access and Peer Influence **-** Themes addressed here include disparities in access to quality STEM education, peer interactions, and school environments. The survey investigated experiences with STEM engagement activities (e.g., robotics clubs or science fairs) and perceptions of peer support. Interviews aim to capture nuanced experiences of access disparities, particularly in rural areas.

d) Power Centers: Institutional Policies and Mentorship - Institutions play a pivotal role in shaping STEM participation through policies, mentorship programs, and workplace culture. Survey questions probed workplace inclusivity and the availability of mentorship opportunities, while interviews will investigate how institutional support varies across fields like ICT and engineering.

e) Society: Media and Societal Perceptions - Societal attitudes and media portrayals of STEM professionals influence career aspirations and stereotypes. Survey respondents reflected on how media influences their perception of gender roles in STEM, while interviews will explore how societal norms and stereotypes create barriers for women in technical fields.

f) Cultural Context: Structural and Cultural Contexts - Broader structural and cultural factors, such as economic policies, rural-urban divides, and historical trends, shape opportunities in STEM. Survey questions captured the geographical distribution of access to STEM resources, while interviews aim to explore cultural factors influencing participation, particularly in leadership and entrepreneurship.

3) Utility

To illustrate the utility of the Circles of Influence Framework, below are some examples of observable phenomena within the same Circle of Influence which track across both *Girls in STEM* and *Women in STEM* research categories. These examples highlight the usefulness of employing the framework to show the interconnected nature of influences on STEM participation across an individual woman's life stages.

a) Society and Cultural Circles: Media and Cultural Cues - For both girls and women, media representation emerges from the research as a double-edged sword.

- Girls in STEM: Positive portrayals of girls excelling in STEM are seen as motivating, yet these representations are not widespread or consistent. Girls report being influenced by role models in movies, TV shows, or campaigns that normalize STEM participation but face counter-narratives that STEM is “for boys.”
- Women in STEM: Media narratives often highlight “exceptional” women in STEM, such as tech pioneers or Nobel laureates, but fail to depict ordinary professionals, reinforcing the perception that STEM careers are unattainable for the average woman. These limited portrayals contribute to the persistence of stereotypes.

b) Family Circle: Family Support - Family plays a pivotal role in influencing early STEM engagement and sustaining participation through career transitions.

- Girls in STEM: Parents encouraging participation in STEM activities, such as science fairs or robotics clubs, significantly boost confidence and interest. The presence of family members in STEM fields can inspire career aspirations, though this effect varies depending on exposure levels and socio-economic context.
- Women in STEM: Spousal support becomes critical in later stages, particularly for work-life balance. Women report that supportive partners help mitigate the “double burden” of career and caregiving, while unsupportive dynamics can reinforce attrition from the STEM pipeline.

c) Community Circle: Mentorship and Community Support - The availability of mentors and community resources profoundly shapes trajectories in STEM fields.

- Girls in STEM: Teachers and local community programs are often the first external influencers. Girls who participate in STEM-related extracurriculars report higher interest levels, while the absence of such opportunities (especially in rural areas) widens engagement gaps.
- Women in STEM: Professional mentorship becomes vital, offering guidance and advocacy in male-dominated workplaces. However, women often cite a lack of senior female mentors as a barrier to advancement, perpetuating challenges in reaching leadership roles.

Themes highlighted here will be picked up again in later sections of the present report and in future Research Activities of the project.

VI. Preliminary Findings

A. Desk Research

Based on Desk Research conducted in the project, it may be concluded that Romania's leadership in STEM, and especially participation of girls and women in Technology fields, can be attributed to a unique combination of historical, economic, and cultural factors, which are highlighted in this section.

1) Historical Emphasis on Technical Education

Romania's education system has long emphasized technical skills and STEM disciplines, a legacy of its industrial development history. This focus has created strong pathways in fields like mathematics, engineering, and ICT, fostering a foundation for gender equity in STEM [35].

2) Competitive ICT Sector

Romania's thriving ICT outsourcing industry, centered in urban hubs such as Bucharest and Cluj, provides accessible career opportunities. These cities have become global outsourcing leaders, and their demand for skilled ICT workers has contributed to greater gender inclusivity in the sector [36].

3) Above Average Representation of Women in STEM Studies

Women comprise 42.5% of STEM graduates in Romania, compared to the EU average of 32.8%, with ICT and natural sciences attracting significant female enrollment. This success reflects both the appeal of these fields and societal expectations that align STEM careers with flexible work-life balance [37].

4) Cultural Openness in ICT

While traditional gender roles persist in certain STEM disciplines, the ICT sector benefits from progressive societal attitudes, which normalize women's participation and create visible role models for younger generations [38].

5) Supportive Policies and EU Frameworks

Romania's Strategic Initiative for Digitization of Education (2021-2027) aligns with EU goals like the Digital Decade Policy 2030, providing funding and frameworks to promote gender equity in digital fields [39][40].

6) Urban Infrastructure and Ecosystem

Urban centers like Cluj and Bucharest act as digital innovation hubs, offering infrastructure, resources, and networks that drive gender representation in ICT. However, rural and suburban areas remain underserved, reflecting a broader urban-rural divide in access to education and STEM careers [41].

B. Online Surveys

While Desk Research permits observation of phenomena like the foregoing, the project's Research Activities, namely Online Surveys, Interviews and Evaluations, promote better understanding of the genesis of these phenomena, how they impact the subject of the research, and if desirable, whether they may be replicated and scaled. This section considers the Online Surveys carried out in the project.

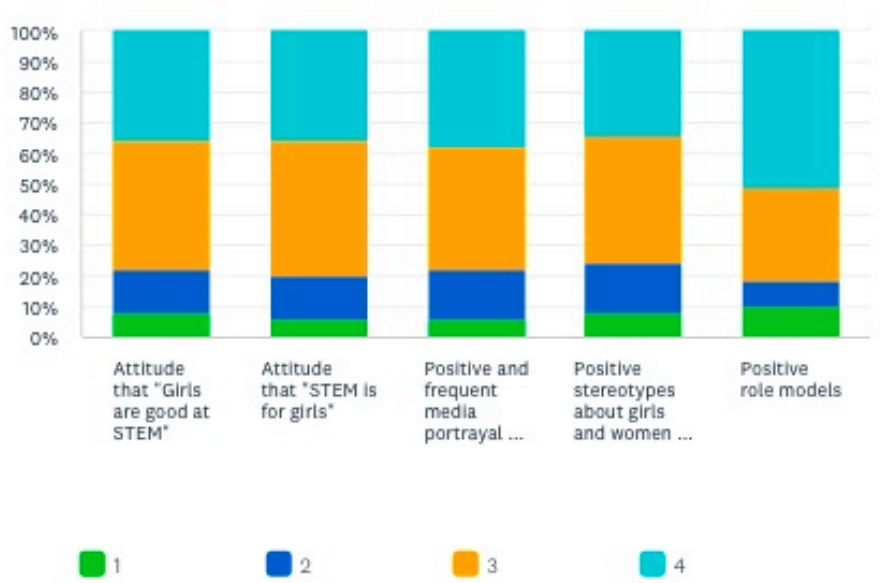


Figure 4: "How Important are Cultural Cues for Girls in STEM?" Survey Question

1) Approach

Through the project's Research Activities, two versions of online surveys were generated in two languages, English and Romanian, in order to reach *adult ecosystem actors* and *students aged 17 years or younger*. The rationale for two survey versions based on target-respondent age was, first, in order to *address age-based privacy and data protection priorities;* and second, to test accuracy of assumptions like the following:

- Perspectives on the question of "Gender and STEM Education" may differ depending on age;
- Unconscious biases may evolve over time; and
- The attention required to finish a survey might be age-dependent.

a) Adult Surveys - Based on priorities outlined in the survey Methodology as captured in the Preliminary Report, the initial Research phase of the project aims to prioritize responses for Adult Surveys, i.e. to gain feedback of Ecosystem Actors. The Adult Survey consists of fifty questions in two languages, and the questions range from ranking factors (e.g., Family Support, Public Programs for Girls in STEM) to demographic and behavioral insights. Respondents rank observable phenomena by importance, provide opinions, and share background details. The structured question design allows both qualitative and quantitative insights, ensuring a solid understanding of factors influencing participation of girls and women in STEM domains.

b) Question/Response Categories - Project Surveys and Interviews focus on the Key Themes mentioned above, reflected as categories and subcategories in which survey Questions are grouped, and include the following:

- **Personal Background:** This survey category gathers demographic and foundational information about survey respondents, including their age, gender, primary language spoken at home, occupation, and highest level of education. These data points provide essential context to understand the diversity of participants and their varied experiences, forming the groundwork for more nuanced analysis.

- Education in Romania: Focusing on survey respondents' interactions with the Romanian education system, this category examines their roles—whether as students, educators, or policymakers—across primary, secondary, and tertiary levels. It also includes experiences with informal education, lifelong learning, and private sector programs, capturing the breadth of educational pathways influencing STEM engagement.

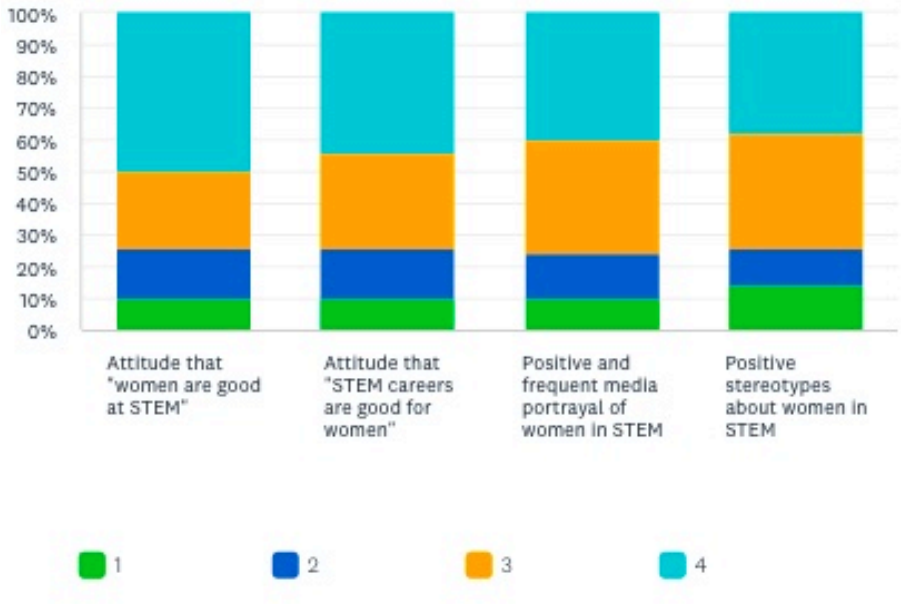


Figure 5: "How Important are Cultural Cues for Women in STEM?" Survey Question

- STEM in Romania: This category explores participation in STEM fields, looking at the roles respondents occupy, from students to professionals and decision-makers. It dives into their years of experience across science, technology, engineering, and mathematics, offering insight into the state of STEM involvement in the Romanian context.

- Girls in STEM: The Girls in STEM category examines foundational factors shaping young girls' engagement with STEM during their formative years. The focus here is on early impressions and access points—critical years where engagement or disengagement with STEM often begins. Girls' experiences are highly influenced by immediate environments like family and school. The subcategories are structured to capture a comprehensive view of these influences:

- *A Girl's Own Beliefs* - This subcategory explores how girls perceive their abilities and potential in STEM. Confidence, interest, and awareness of STEM's value are key elements. For

instance, questions may examine whether girls feel capable of pursuing STEM careers or see STEM as relevant to their lives.
- *Family Factors (Girl)* - This section looks at the role of family in nurturing STEM aspirations. It examines parental encouragement, siblings' influence, and exposure to relatives who work in STEM fields. The type and frequency of support can reveal critical points of influence or neglect.
- *Community Support (Girl)* - Teachers, school programs, and extracurricular activities fall under this subcategory. These are seen as pivotal in providing hands-on STEM experiences and fostering peer networks. Community factors also include local resources and opportunities for STEM engagement.
- *Cultural Cues (Girl)* - Media portrayals, societal stereotypes, and community narratives about "what girls can do" influence how girls see themselves in STEM. This subcategory highlights how cultural messages either reinforce or challenge traditional gender roles.

- Women in STEM: The Women in STEM category builds on the framework for girls but addresses additional dimensions relevant to adult experiences in education, careers, and leadership. This category also captures more complex and systemic issues, reflecting the cumulative challenges and opportunities women face as they progress through the STEM pipeline. It expands to include structural factors like leadership, entrepreneurship, and systemic inequities in academia and in the workplace. This Category is therefore more comprehensive, covering systemic barriers and enablers unique to women. Closely reviewing the "Girls in STEM" and "Women in STEM" question categories, as they intersect with different stages in the "Leaky Pipeline," helps us to highlight the evolution of themes from girls' experiences to women's roles, allowing us to draw comparisons across life stages.

- *A Woman's Own Beliefs* - This subcategory examines women's confidence, career motivations, and self-perception in STEM fields. It also looks at how societal expectations shape women's ambitions and career trajectories in male-dominated environments.
- *Family Factors (Woman)* - Here, the focus shifts to how family dynamics evolve, including support from spouses or partners and balancing domestic responsibilities with professional goals. This subcategory also explores how caregiving roles impact career advancement.
- *Community Support (Woman)* - Mentorship, workplace culture, and professional peer networks are key themes. This subcategory investigates how inclusivity, access to mentorship, and collaboration influence women's persistence and growth in STEM careers.
- *Cultural Cues (Woman)* - Broader societal narratives, media representation, and workplace policies fall under this subcategory. It highlights how systemic biases, stereotypes, and workplace dynamics impact women's ability to lead, innovate, and thrive in STEM fields.
- *Leadership and Entrepreneurship* - Unique to this category, this subcategory examines women's representation in leadership positions, entrepreneurial ventures, and decision-making roles. It investigates systemic barriers like funding access, pay equity, and bias in promotion practices.
- *Research and Academia* - Another addition, this subcategory focuses on women's participation in academic research and their representation as faculty or research leads. It highlights challenges like gender bias in publishing and research funding.
- *Work-Life Integration* - This subcategory looks at policies and practices that support women in balancing their careers with family and personal life. It includes workplace flexibility, childcare access, and organizational support.

- Personal Opinions: Gathering respondents' subjective views, this category examines perceptions about the importance of STEM for girls and women, satisfaction with existing initiatives, and recommendations for fostering greater participation. These insights reflect public attitudes and areas for potential improvement.

- Personal Action: Highlighting individual contributions, this category captures respondents' involvement in supporting gender equity in STEM, whether as mentors, advocates, or funders. It sheds light on personal commitments and motivations to drive change at various levels.

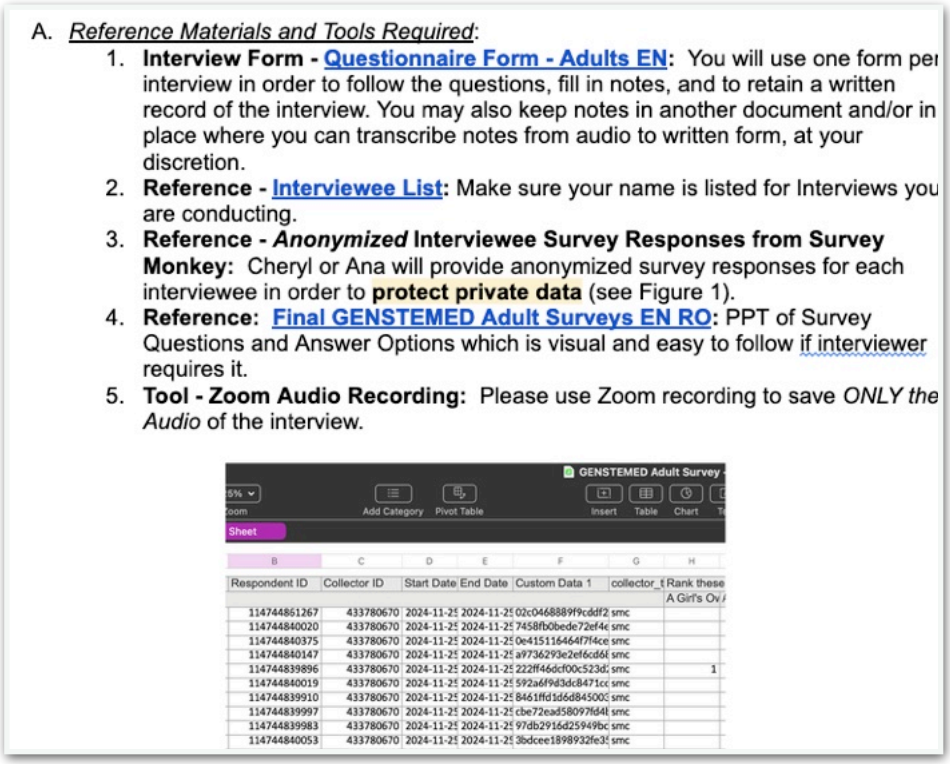


Figure 6: GENSTEMED Interview Instructions (Excerpt)

- Survey Follow-Up: Finally, this category ensures ongoing engagement with respondents, asking about their willingness to participate in follow-up interviews, receive updates, and remain in contact with the project team. It underscores the importance of maintaining connections for future phases of the research.

c) Respondents - The aggregated dataset from the Online Surveys included 53 responses to the English Adult Survey and 21 responses in to the Romanian version. Respondents varied in age, gender, and cultural context. Key demographics showed a diverse population participating, particularly focused on adults involved in education or STEM-related fields. This demographic variety allowed for a broad view of perceptions and priorities.

- All Respondents: Across all 74 respondents, the majority were young to mid-career adults, with most aged between 18 and 44 years. The demographic represents individuals likely to be actively engaged in STEM fields or education. Gender distribution is fairly balanced, with a marginal male majority (56% male, 44% female). And educational attainment is notably high, with a significant portion of respondents holding Master's degrees or PhDs (see below).

Urban representation dominated survey feedback, with rural and suburban respondents largely absent, highlighting potential gaps in STEM accessibility or survey outreach in less urbanized areas. The alignment of responses across age, gender, and education

shows that the survey successfully captured perspectives from key stakeholders in STEM education and engagement, though gaps in younger and older demographics are evident.

- Romanian-language Respondents: Respondents to the Romanian language survey (21 of the 74) reinforce trends noted in this section while showcasing some unique characteristics. Their educational attainment is particularly striking, with 71.43% holding advanced degrees, including 42.86% with PhDs. All Romanian respondents are from urban areas, emphasizing a significant gap in rural engagement. In this sub-group, gender balance aligns with the overall data, with a slight male majority, and age distribution mirrors the broader group, focusing on 18-44-year-olds.

- Takeaways: Overall, Adult Survey respondents collectively reflect a well-educated, urban, and professionally active demographic, which might be considered ideal for providing informed perspectives on STEM issues. However, the lack of representation from rural areas, younger or older age groups, and non-traditional gender categories points to a need for broader outreach in the next phase where expanding the respondent pool could provide a more comprehensive understanding of the barriers and opportunities impacting gender equity in STEM education.

2) Survey Findings

Based on the types of questions posed in the Surveys, and linking these to Research Activity categories, some preliminary findings from the Online Surveys are highlighted in this section.

a) Key Themes - In the two main Research Activity categories, the following key themes emerged from survey responses.

- Girls in STEM:

- *Beliefs and Self-Perception* - The survey responses emphasize the importance of a girl's own beliefs in influencing STEM participation. Specifically:
  - *Belief that STEM careers are exciting*: Scored highest with a weighted average of 3.04/4.
  - *Belief that girls can do valuable things with STEM*: Scored 2.88/4, suggesting that while many recognize the value of STEM, confidence gaps may remain.
- *Family Support* - Family support emerged as a key factor, with parents/guardians' encouragement rated the highest (3.26/4). Mothers working in STEM were perceived as influential (3.04/4), slightly higher than fathers working in STEM (2.94/4).
- *Community Support and Role Models* - Community support, particularly through *school STEM programs* and *teachers*, scored 3.2/4. Role models—both in media and personal networks—had a weighted average of around 3.1/4, indicating their significant role in shaping aspirations.
- *Public and Private Programs* - Programs specifically designed for girls, such as STEM education initiatives, received high scores (3.32/4), indicating their perceived importance. However, private initiatives like corporate-sponsored programs scored slightly lower (3.16/4), reflecting a need for increased visibility and accessibility.
- *Cultural Cues* - Cultural attitudes, such as the belief that "STEM is for girls," scored 3.1/4. However, frequent and positive media portrayals of girls in STEM were rated slightly higher (3.22/4), underscoring the need for societal narratives that normalize girls' participation in STEM.

- Women in STEM:

- *Career Beliefs and Motivation* - Key motivators for women in STEM careers include *rewarding career paths* (3.14/4) and *financial incentives* (3.16/4). However, confidence—reflected in "belief that women are good at STEM"—scored 3.12/4, highlighting persistent gaps in self-perception.
- *Family Influence* - Support from spouses and other family members was deemed vital (both scoring 3.06/4). Interestingly, having a relative in STEM scored lower (2.92/4), suggesting that direct familial mentorship may not be as influential as general family encouragement.
- *Community and Mentorship* - Mentorship programs were rated 3.04/4, signaling their role in career development. Similarly, support from colleagues and peer groups scored 3.08/4, reflecting the importance of workplace culture in retaining women in STEM fields.
- *Public and Private Sector Support* - Programs addressing workplace flexibility (3.2/4) and childcare initiatives (3.31/4) were highlighted as critical enablers. Pay transparency and equity initiatives also scored highly (3.16/4), signaling the need for systemic interventions to promote fairness.
- *Leadership and Entrepreneurship* - Despite progress, women in leadership roles face challenges. Gender equity in leadership programs scored 3.2/4, while entrepreneurship initiatives, such as funding for women entrepreneurs in STEM, scored slightly lower (3.08/4).

b) Takeaways - Pending additional responses forthcoming in the project, some initial findings that can be drawn from the Surveys related to the two Key Themes above so far include the following:

- Girls and women face unique but interconnected barriers along the STEM pipeline: Early interventions targeting beliefs, role models, and parental support are critical for girls, while mentorship, flexible work policies, and leadership programs are essential for women;

- **The importance of cultural narratives cannot be overstated:** Both groups of girls and women benefit significantly from positive media portrayals and visible success stories; and
- **Systemic support through targeted programs is key:** Public and private initiatives addressing educational access, workplace equity, and entrepreneurial opportunities must be scaled up to close gender gaps in STEM.

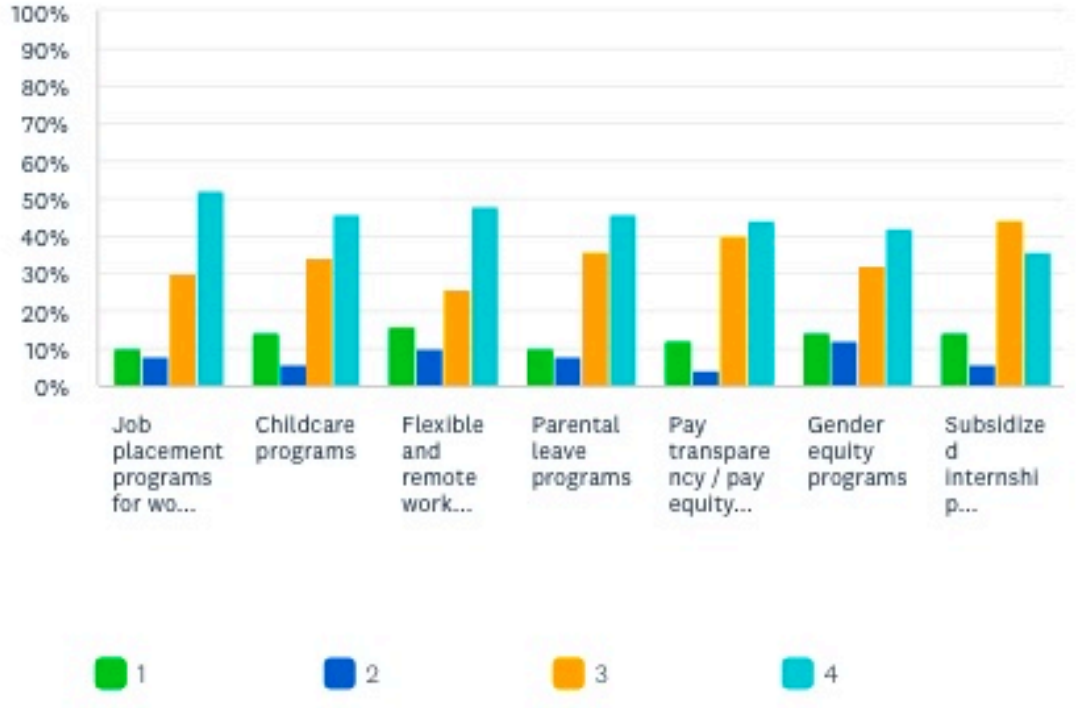


Figure 7: "How Important are Public Programs for Women in STEM?" Survey Question

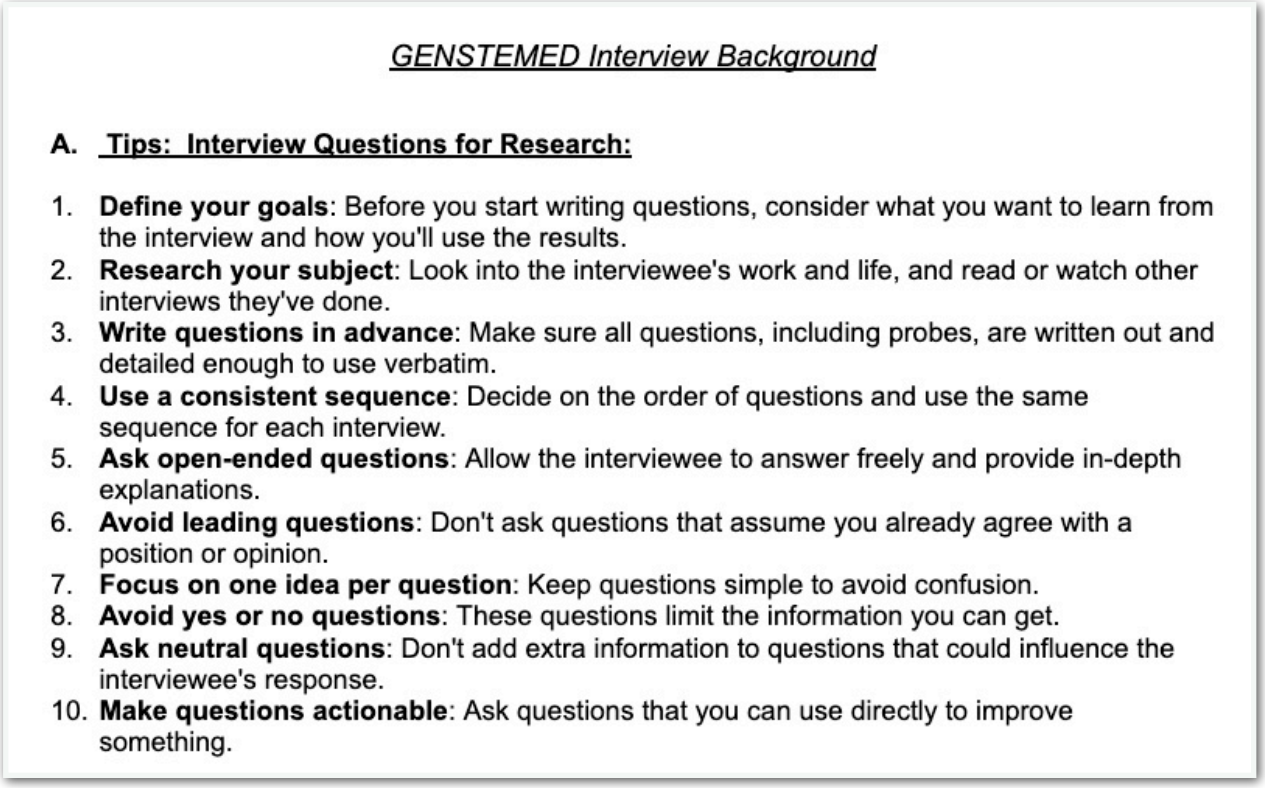
c) Circles of Influence Framework - In turn, the research findings can be viewed through the Circles of Influence Framework as outlined below.

- Girls in STEM:

- *Self* - Survey data reveals that girls' confidence in STEM subjects is a critical factor in their early engagement. Beliefs about their abilities and the relevance of STEM to their future scored moderately, with noticeable gaps in subjects like mathematics and physical sciences. This aligns with early points in the Leaky Pipeline, where perceptions of STEM competence begin to diverge by gender.
- *Family* - Family support emerged as a significant influence. Girls with parents or relatives in STEM were more likely to express interest and confidence in pursuing STEM fields. However, the data also indicates disparities in the type of support—emotional encouragement was more frequent than material or practical support (e.g., funding for extracurricular STEM programs).
- *Community* - Schools and local programs play a vital role in sustaining girls' interest in STEM. Teachers' encouragement and extracurricular activities, such as science fairs and robotics clubs, were highlighted as key enablers. However, rural respondents reported fewer opportunities for STEM engagement, reflecting geographic inequities in the pipeline.
- *Power Centers* - Institutional influences, such as curriculum design and school policies, received mixed feedback. Some respondents noted that STEM opportunities in primary and

secondary schools are unevenly distributed, with limited resources available in public schools compared to private institutions.

- *Society* - Broader societal narratives about gender roles in STEM showed both positive and negative trends. Media representation of girls in STEM was seen as improving but still insufficient to normalize the idea of girls excelling in technical fields.
- *Cultural Context* - Cultural stereotypes, such as the perception that STEM is "too difficult" for girls, remain persistent barriers. Respondents identified a lack of visible female role models in STEM as a critical gap in shifting cultural norms.



GENSTEMED Interview Background

A. Tips: Interview Questions for Research:

1. **Define your goals**: Before you start writing questions, consider what you want to learn from the interview and how you'll use the results.
2. **Research your subject**: Look into the interviewee's work and life, and read or watch other interviews they've done.
3. **Write questions in advance**: Make sure all questions, including probes, are written out and detailed enough to use verbatim.
4. **Use a consistent sequence**: Decide on the order of questions and use the same sequence for each interview.
5. **Ask open-ended questions**: Allow the interviewee to answer freely and provide in-depth explanations.
6. **Avoid leading questions**: Don't ask questions that assume you already agree with a position or opinion.
7. **Focus on one idea per question**: Keep questions simple to avoid confusion.
8. **Avoid yes or no questions**: These questions limit the information you can get.
9. **Ask neutral questions**: Don't add extra information to questions that could influence the interviewee's response.
10. **Make questions actionable**: Ask questions that you can use directly to improve something.

Figure 8: GENSTEMED Interview Background (Excerpt)

- Women in STEM:

- *Self* - Women's confidence in STEM abilities showed moderate scores, with many highlighting imposter syndrome and societal expectations as challenges. Career motivations were high among women already in STEM, but barriers like unequal pay and limited advancement opportunities tempered enthusiasm.
- *Family* - Spousal and familial support were crucial for women balancing STEM careers with personal responsibilities. Respondents frequently cited challenges related to caregiving roles, particularly in dual-career households. Support from family was more influential than mentorship in some cases, reflecting the continued importance of domestic dynamics.
- *Community* - Workplace culture and mentorship programs received mixed feedback. While mentorship was seen as a valuable resource, respondents noted that male-dominated workplaces often lacked inclusive practices. Peer support networks, however, were highly rated as sources of encouragement and resilience.
- *Power Centers* - Institutional policies such as flexible work arrangements and leadership training programs were identified as critical enablers. However, their availability and

accessibility varied widely. Respondents highlighted gaps in equity-focused initiatives, such as childcare support and transparent promotion criteria.
- *Society* - Media portrayals of women in STEM were seen as improving but still skewed toward "exceptional" cases rather than representing diverse, everyday professionals. Societal narratives often reinforced the "double burden" of career and family.
- *Cultural Context* - Deeply rooted gender norms, such as expectations around caregiving and leadership styles, were flagged as persistent obstacles. Women in leadership roles reported facing more scrutiny compared to male counterparts, particularly in technical fields.

d) Leaky Pipeline Insights - Mapped to the “leaky pipeline” phenomenon, the following phenomena can be observed from the research.
- *Girls in STEM* - The primary points of attrition for girls include a decline in confidence during secondary education and unequal access to STEM resources, particularly in rural areas. Early interventions targeting beliefs and systemic inequities are essential.
- *Women in STEM* - The major points of attrition for women occur during transitions from tertiary education to careers and from mid-level positions to leadership roles. Addressing systemic barriers—such as workplace policies, mentorship availability, and cultural norms—is critical to retaining women in STEM.

C. Interviews

Following on outcomes gathered from the Online Surveys, a series of Interviews are conducted with minimum 50 respondents who previously shared feedback via the Surveys. The Interviews are captured consistent with the Methodology elaborated for the project, as translated to the Circles of Influence Framework, and linked to the Leaky Pipeline phenomenon.

1) Background

a) Goals - The purpose of the interviews is to validate responses to the project Surveys and, by utilizing open-ended prompts, gain additional insight on respondent knowledge, experience, opinions and feelings about research subjects.

b) Information to Be Collected/Validated - Aligned with the project research objectives, a *list of the specific information to be collected* through the interviews is highlighted below.

- *Demographic Data* (validated from Survey responses) - Gender, socio-economic background, ethnicity, language, etc.;
- *Knowledge/Awareness* of STEM, of Gender Imbalance in STEM (Education, Workforce, Leadership); by gender-parity in STEM fields; *Optionally:* of wider challenges to Education in Romania; of opportunities/challenges posed by Emerging Technologies; challenge of brain-drain; other;

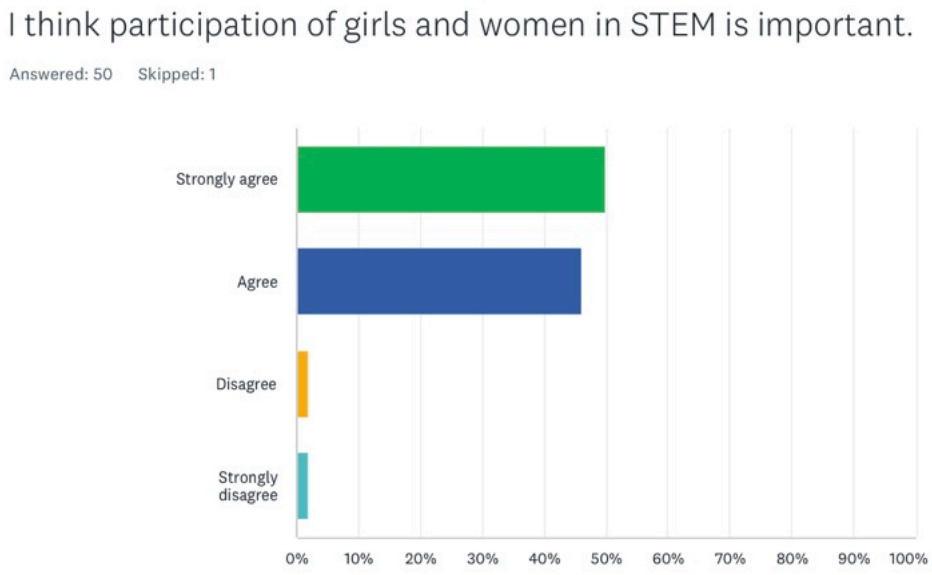


Figure 9: An Opinion or Belief captured in Research Activities

- *Experience* of STEM, Gender Imbalance in STEM (Education, Workforce, Leadership) & Decisions/Actions related to this;
- *Opinions* about STEM, Education, Gender Imbalance (in STEM - Education, Workforce, Leadership), and ideas of how to tackle challenges;
- *Feelings* about gender stereotypes (in STEM / Education / Leadership / Elsewhere); and, *Optionally:* about Emerging Technologies as opportunity or risk, etc.

c*) Notes on Structured Interviews*[1] - The interviews utilize a structured approach which involves asking the same set of pre-written questions to every participant. This ensures consistency, making it easier to compare data between participants or groups later. To conduct structured interviews, the project seeks to follow the guidelines which are captured in the ***Questionnaire Form*** in Annex to the present report, including:

- *Pre-written Questions* - All questions, including probes, have been written out in advance.
- *Detailed Questions* - Questions are detailed enough to be used *verbatim* during interviews.
- *Consistent Sequence* - The sequence of questions is pre-decided and will be consistent across interviews.
- *An Example* of a Structured Interview Question follows:

  Question: You ranked *Community Support* as most important *for Women in STEM*. Please explain why.

  Probes:
  - Why is Community Support for Women in STEM so important?
  - What kind of Community Support for Women in STEM are important?
  - Are there other kinds of factors that are important for Women in STEM?
- *Benefit* - Structured interviews are optimal for the project because the aim is to collect uniform data collection across all participants as this is useful in large-scale studies and it gives us the option to also compare responses quantitatively.

d) Information to Collect - The project draws from *Patton's six types of questions* as a framework for shaping inquiries, all of which are utilized in the Interviews except Sensory inquiries:

- *Behavior or Experience* - Explore participants' actions and experiences.
- *Opinion or Belief* - Probe participants' beliefs, attitudes, and opinions.
- *Feelings* - Delve into the emotional aspects of participants' experiences.
- *Knowledge* - Assess participants' understanding and awareness of a topic.
- *Sensory* - Investigate how participants perceive and interact with their environment.
- *Background or Demographic* - Collect information about participants' personal characteristics and histories.

2) Resources

Resources utilized in the project in order to prepare, carry out and process Interviews are highlighted below and included in the Annex to the present report.

a) *Interview Questionnaire (IO3a)* - An ***Interview Questionnaire*** template is used in the project in order to collect responses from Interviewees to the structured interviews outlined within the Questionnaire. Each Questionnaire contains an outline of the Survey questions and responses which provide an initial basis of inquiry for further elucidation via Probes in the Interview.

b) Interview Background - The ***Interview Background*** document contains the rationale for the Interview approach, the types and form of questions to be asked, and the link between these and the other project research activities and the research objectives.

c*) Interview Instructions* - The ***Interview Instructions*** document contains specific instructions for individuals conducting interviews regarding how, with what tools and in what manner to carry out the interviews, with a general indication on managing interview results. This document forms a footprint to facilitate processing of interview outcomes across multiple interviewees and interviewers.

[1] https://indianscribes.com/structured-interview/

VII. Preliminary Conclusions and Way Forward

It is still early in the Research Activities phase of the “Gender and STEM Education in Romania” project to draw conclusions about the factors uniquely contributing to Romania’s apparent leadership in participation of girls and women in STEM domains, particularly Technology. High-level initial findings are included herewith, and some recommendations may be suggested subject to conclusion of the project’s research with due consideration for factors highlighted in the second section of this report.

From the desk research, then, it may be inferred that Romania’s leadership in ICT may offer a blueprint for expanding gender equity across all STEM domains in Romania and beyond, in which context bridging the urban-rural divide should be a priority, with investments in infrastructure and targeted outreach to underserved regions [42]. Mentorship programs, leadership training, and initiatives that foster entrepreneurship among women in STEM are also critical for sustaining progress. Aligning with EU frameworks such as the *Digital Decade Policy 2030* can provide valuable resources and support for these efforts, and beyond structural reforms, cultural shifts are essential. Namely, *increasing the visibility of female role models* and *promoting inclusive media narratives* can inspire and empower future generations. By scaling these initiatives, Romania can also build on its ICT successes and emerge as a leader in gender equity across the STEM ecosystem in Southeastern Europe, in the EU, and beyond [43].

In addition, it is clear that to achieve a vision of this kind will require a multifaceted approach that includes the following:
- **Policy Interventions:** Implementing policies that promote gender-sensitive teaching methods and curricula can enhance girls' participation in STEM from an early age [44].
- **Mentorship and Role Models**: Establishing mentorship programs and increasing the visibility of female role models in STEM can provide the necessary support and inspiration for girls and women to pursue and sustain STEM careers [45].
- Workplace Reforms: Creating inclusive workplace cultures that address discrimination and support work-life balance is crucial for retaining women in STEM professions [46].
- Continuous Monitoring: Regularly assessing the effectiveness of interventions like the foregoing, through data collection and analysis, will ensure that progress is being made and allow for adjustments as needed.

By adopting strategies like these, Romania can work toward further bridging the gender gap in STEM studies and careers, and can strengthen representation of women in the STEM workforce, in entrepreneurship, and in leadership across the board. It can thus harness the full potential of its talent pool for economic and societal advancement, and continue to provide a benchmark for "Gender and STEM” that is worth emulating in the region, in Europe, and globally.

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Annex B: 29 Nov - 51 Aggregated Responses GENSTEMED Adult Survey - English

Annex C: Final GENSTEMED Adult Surveys RO EN

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Annex E: GENSTEMED Interview Background

Annex F: GENSTEMED Interview Instructions v2.0

Annex G: GENSTEMED Project Plan v2.0

Annex H: GENSTEMED Interview Questionnaire Form - Adults EN v2.0

Annex I: GENSTEMED Survey Approach

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Annex L: GENSTEMED GDPR Policy