GirlsTech evaluation report: November 2016 – June 2018

GirlsTech

Girls Tech is an Erasmus+ KA2 project which aims to explore the low participation of females in STEM. The main focus of the project is on technical education. Eight European countries (the Netherlands, UK, Spain, Slovenia, Estonia, Romania, Portugal and Finland) are sharing current activities to improve their own policies and practices and encourage more females into STEM subjects. The project timeframe is 1 September 2016 to 31 August 2018.

Background

The eight countries were chosen to ensure a spread of those which have good and poor female participation in STEM education and the labour market.

***Participation of girls/woman in the STEM Labour market (Eurostat statistics 01-01-2016)**

place	Country	%	Ranking
1	Estonia	42	High
2	Portugal	37	High
3	Romania	36	High
4	Slovenia	35	High
5	Spain	28	Medium
6	Finland	27	Medium
7	UK	25	Medium
8	Netherlands	18	Low

****Participation of girls/woman in VET Education (Eurostat statistics 01-01-2016)**

place	Country	%	Ranking
1	Estonia	41	High
2	Romania	32	High
3	Finland	19	Medium
4	Portugal	16	Medium
5	UK	15	Medium
6/7	Spain	8	Low

6 / 7	**Slovenia**	**8**	**Low**
8	**Netherlands**	**7**	**Low**

Project evaluation

Overall participants observed that they benefitted from the opportunity to learn about the structure of each other's education systems and how that impacts on female participation in STEM. For example in Romania there is little or no differentiation between what in other countries are perceived to be male dominated or female dominated subjects.

Participants also welcomed the opportunity to see instruments in action and meet female students and alumni who are now working in STEM and are ambassadors for the promotion of STEM participation by females. Roundtable discussion and reflection were also felt to have been helpful.

In some of the countries (Romania and Estonia in particular) the focus was predominantly on IT. Overall Engineering was an area of focus too. There was less emphasis on construction and lower level learning for example.

An overview of interventions can be found below, but overall participants opinions changed slightly between the beginning and end of the project. At first it was felt that interventions should focus solely on females, however in countries with high participation, such as Romania, there is no differentiation, that is it is not seen that girls should be singled out as different and specifically needing interventions. It is important that the importance and value of STEM is promoted to and recognised by all young people.

Project learning:

1. **Male / female stereotypes and perceptions of STEM subjects start early**

Recommended interventions:

- More work should be directed at parents/carers – directing girls towards gender neutral play
- Young people need at least 5 interventions, experiencing STEM occupations or STEM based projects to make an impact. This could be a visit by a STEM ambassador, a STEM based project or club/enrichment activity, work experience or other.
- Females respond better to the bigger picture– show the variety of opportunities that there are- transferable skills/ girls respond to make a difference eg you are making an impact

2. **Females into STEM needs to be a strategic priority for training providers**

Recommended interventions:

- Embedding equality and diversity within the curriculum
- Open days – show other options; new options eg few people understand what 'marine engineering' is.
- Use alumni/peers to help to get the message across
- Review marketing materials - should have equality of males and females in promotional photos
- Language – allowing females to gain improved self-esteem – what I am good at!

3. Teaching strategies to engage females

Recommended interventions:

- Skills championships – promoting females too
- Consider teaching strategies that engage females – project work rather than end of course assessment
- Female role models – invite in external speakers
- Opportunities to engage in work placements

4. Retaining females in the STEM workforce

Recommended interventions:

- Staff recruitment and language - use more adjectives than verbs/actions, for example: Are you creative and reflective, rather than in this job you will create new designs and evaluate project outcomes.
- Female to female buddying (within organisation/ across organisations)
- Gender neutral environment – males and females working alongside each other
- Equipment and resources made for females (PPE in female sizes)
- Flexibility within the employment market – eg part time/ job share.