

## **How can we increase girls' interest in the world of technology already at school?**

The European Year of Skills officially started on 9 May 2023. To contribute to skills development the Digital Skills and Jobs Platform team, together with the European Commission (EC), organised an award competition and selected the project Empower Girls' Creativity Through Use of Digital Technologies (SparkDigiGirls, [www.digigirls.eu](http://www.digigirls.eu)) as a finalist for the European Digital Skills Awards 2023 in the category Youth in the digital world. This is one of the five categories announced, with a total of 330 applications for this competition.

"Our project is unique because it combines three different elements: technology, creativity and girls. We are very proud of the EC assessment. We are the only one from Lithuania to make it to the finals," says Laura Grinevičiūtė, director of the Rural Internet Access Points Association.

This award confirms the relevance of the chosen project theme - the under-representation of girls in IT. According to Eurostat 2021 data, women represent only 19% of all IT students in the EU. In Lithuania, the proportion of women studying IT is around 23%, in Greece 21%, in Portugal 20% and in Slovenia 17%.

## **The main reasons influencing low interest of girls in technologies**

Research has shown that in primary education, boys and girls are almost equally likely want to work in technology-related fields. However, girls' attitudes and opinions change later in life and they are more likely to choose careers in the social sciences, humanities and medicine than in IT, engineering or mathematics.

There are many reasons for the lack of interest in IT. Negative beliefs and stereotypes about technology, such as "IT is a man's job", "IT is just coding", influence girls' choices.

The lack of examples of successful women in IT also contributes to girls' low interest in IT. In addition, girls do not understand the opportunities offered by the IT sector and therefore do not take advantage of them. "Girls think that people who work in IT sit in front of a computer screen from morning until late at night and code. But this is a myth. There are many different and creative jobs in the IT sector, such as graphic designer, data analyst, engineer, IT project manager, etc.," says Renata Danielienė, a lecturer at the Kaunas Faculty of Vilnius University.

## **Technology can help unleash creativity**

In response to the need to increase girls' interest in the world of IT, partners from Lithuania, Portugal, Slovenia and Greece have launched a two-year international project funded by the Erasmus+ Strategic Partnership Programme for Youth.

The project aims to engage girls aged 14 and over in the latest technologies (such as artificial intelligence, augmented reality, Internet of Things, programming) by integrating a creative approach and demonstrating how technology can be used in everyday activities.

### **Programme Unleash Your CreativITy with technology**

The project developed online learning programme Unleash Your CreativITy with Technology. The aim of the programme is to engage girls aged 14-18 in a hands-on, experiential learning model to solve various life situations and problems through the practical use of modern technologies such as artificial intelligence, augmented reality, programming, blockchain and cloud computing.

"Today, we are witnessing an evolution from complex programming languages to intuitive systems that do not require deep and prior knowledge. This is the model we have chosen for this project. Online tools, apps and mobile applications help to increase girls' motivation to learn, creativity, interest in technology and understanding of its practical benefits," says Renata Danieliene.

Between January and March this year, 279 girls from Lithuania, Portugal, Slovenia and Greece took part in the pilot training of the app. The distance learning programme consists of 16 separate learning paths, called challenges. Each challenge covers a specific topic or area of interest to girls aged 14 and over. For example, fashion, design, environment, cooking, art, etc. Each challenge has two key interwoven components: technology (artificial intelligence, augmented reality, internet of things, coding, 3D modelling and printing, cloud computing, blockchain) and real-life situations/problems that girls face in their everyday lives. For example, how to make a birthday present in 3D, how to design clothes using programming, how to learn about carbon footprint, how to create a culinary website, how to create your own NFT and many other interesting challenges.

Each challenge is implemented with specific steps. The girls are introduced to almost 30 different online tools, apps and mobile applications. By following the steps and interactive tasks, they will know exactly where to start and how to complete the challenge. The programme is available free of charge to all registered users via the Moodle platform in up to five languages.

### **What does it take to change girls' attitude?**

In addition to online learning programme, the project partners organised a number of engaging activities. "During the project, it was very important for us to show girls that there are women working in IT. We made videos, organised different discussions in schools, organised online events, international learning activities, managed an Instagram account so that girls could get to know the women, their

stories, interesting jobs, specialities in IT, etc." - Says Laura Grinevičiūtė, director of the association.

We hope that the results of the project will help to break down prejudices and stereotypes and increase girls' interest in the world of technology.