



UNIVERSIDAD  
DE CELAYA

The SDG Accord

*The University and College Sector's Collective Response to the Global Goals*

### **Integration of SDGs in**

- ☐ Institutional governance/strategic level
- ☐ SDGs in research
- ☐ SDGs in campus operations
- ☐ SDGs in curriculum development
- ☒ SDGs in student engagement activities
- ☒ SDGs into community activities
- ☐ SDGs at a whole-institution level

### **Focus on**

- ☐ Goal 1 - No poverty
- ☐ Goal 2 - Zero hunger
- ☐ Goal 3 - Good health and wellbeing
- ☒ Goal 4 - Quality education
- ☒ Goal 5 - Gender equality
- ☐ Goal 6 - Clean water and sanitation
- ☐ Goal 7 - Affordable and clean energy
- ☒ Goal 8 - Decent work and economic growth
- ☐ Goal 9 - Industry, innovation and infrastructure
- ☒ Goal 10 - Reduced inequalities
- ☐ Goal 11 - Sustainable cities and communities
- ☐ Goal 12 - Responsible consumption and production
- ☐ Goal 13 - Climate action
- ☐ Goal 14 - Life below water
- ☐ Goal 15 - Life on land
- ☐ Goal 16 - Peace, justice and strong institutions
- ☒ Goal 17 - Partnerships for the goals

### **Leading Women in STEM**

Coordinated by the Faculty of Engineering of the University of Celaya and carried out by engineering students from the same faculty, together they developed the Leading women in STEM project, which aims to promote interest and learning in STEM areas (science, technology, engineering and mathematics) in a group of girls attending 5th and 6th grades of public elementary schools.

In this project, engineering mentors teach participating groups of girls about topics such as mathematics through fun and educational experiences. Promoting the development and the achievement of Sustainable Development Goals 5, 4, 8 and 10.

At first this project began to be developed in person at the facilities of the University of Celaya in September 2019, then in the period of confinement due to the Covid-19 pandemic the project was truncated in March and in then during the August-December 2020 semester classes were transferred to a virtual modality. Currently in 2022 classes have returned to a face-to-face modality.

In this program engineering students with the role of mentors and professors who coordinate the program plan their classes and activities with the objective of teaching the participating girls advanced topics in science, technology, engineering and mathematics incorporating games and appropriate technological applications to ensure learning of the participating girls. In the same way, in this program parents are involved in their daughters' learning. They can accompany them in the classes, having the option of being present with them in the face-to-face classes, or through their mobile phones when the program was in the virtual modality.

### **BENEFITS**

1. The girls participating in this programme are learning about science, technology, engineering and mathematics, which are advanced for their young age. The subjects that are taught in this programme are equivalent to those that students would learn when they are in the final years of elementary school. With this approach to STEM topics, girls have found a new span of possibilities for their future.
2. Learning is being achieved in a practical and fun way.
3. The girls participating in this programme have said that in the future they will study a university degree in one of the different areas of engineering.

### **CHALLENGES**

1. One of the main challenges of this programme has been the continuity of attendance of the participants. Either virtually due to the connectivity issues, or face-to-face due to transportation issues.
2. Another major challenge in this project was the transfer of the classes to the virtual modality. in addition, during this period many participating students also had attendance problems due to failures in their internet connection or because they did not have access to the internet at home.

## **CONCLUSIONS**

As a conclusion of this project, the University seeks to ensure that more girls are academically on their way to developing their knowledge and skills, so that they have access to education and can continue their studies later on, acquiring as a personal goal in their lives to study a university degree and become professionals. This program was created to support and complement the educational development of these participating girls. The results have been quite satisfactory, the university has managed to have a positive impact on more than 60 girls and has achieved the involvement of 5 public primary schools in the municipality of Celaya, Guanajuato, Mexico.



Image description: Photograph taken from a class given to a group of girls participating in the program  
*Leading Women in STEM*