Empowering Students to Diversify STEM Fields

Figure 1: Mini demonstration for community members and parents at the STEM Training

Figure 2: Some of the female participants from the STEM Training organized by Benin Flying Labs

OVERVIEW	
Flying Labs	Benin Flying Labs
Location	University Campus of Abomey Calavi, Benin
Date	9th to 10th December, 2020

Length (number of days)	2 days
Sector program (optional)	YouthRobotics
Format	In-Person
Co-organizer if applicable	IGATE - L'Institut de géographie et d'aménagement du Territoire
SDGs	GOAL 4: Quality Education GOAL 5: Gender Equality

SCOPE & OUTCOMES	
Type of training	1. Introduction training to drones 2. Youth/STEM training
Goal of the training	1. Create drone awareness 2. Train and empower youth and the workforce of the future
Expected outcome for participants	The participants were expected to: ● Become knowledgeable about the different applications of drones and career options ● Understand drones in general ● Get empowered to further discover future activities and careers based on drones
Confirmed outcome after training	After the training: ● The participants, mostly girls, felt empowered and more confident thanks to their new knowledge ● They gained basic understanding on drones and their various uses ● They have developed ideas on activities they will and can perform using drones
Eventual next steps	Possible internship with at least 4 students per year in partnership with IGate and Benin Flying Labs

PARTICIPANTS	
Profiles and the number of participants	1. Benin Flying Labs members: 2 2. University students: 75
Name of participants' organizations	IGATE 'Institut de géographie et d'aménagement du Territoire, part of the University of Abomey-Calavi
Gender ratio	Female : Male 40 : 35
Who paid for the training?	Free training

CONTENT	
Training components	1. Impart knowledge to the students about drone technology; 2. Empowering women and girls through STEM training that drives them towards careers in ICT 3. Developing data acquisition and analysis skills; 4. Introduction into how to fly a drone (theory based) and use it to draw a map; and 5. Introduction to GIS software like QGIS and Pix4D.
Training resources used/created	● Drone phantom ● QGIS, Pix4D ● Computers ● Blog Post
Approaches and methods used	● The training language was in French ● The opportunities offered to do practical work are on the internship and the participants had a moment to share their academic projects on differents topics such as "Drone technology and its advantages".