STEM TRAINING IN DRONE TECHNOLOGY



Students taking part in theoretical and practical training components

OVERVIEW	
Flying Labs	Nigeria Flying Labs
Location	Akure, Nigeria
Date	September 25, 2024
Length (number of days)	2 hours
Sector program (optional)	YouthRobotics
Format	In-Person
Co-organizer if applicable	Not applicable
SDGs	GOAL 4: Quality Education GOAL 5: Gender Equality GOAL 10: Reduced Inequality

SCOPE & OUTCOMES	
Type of training	1. Introduction training to drones 2. Youth/STEM training

Goal of the training	1. Create awareness for drone technology 2. Develop drone data acquisition skills 3. Develop data literacy/interaction skills 4. Train and empower youth and the workforce of the future
Expected outcome for participants	By the end of the training, the participants expected to become aware of what drone technology is all about, its use, and how they can integrate it into the real-life world.
Confirmed outcome after training	The participants gained essential skills in drone technology, including the technical know-how to operate and maintain drones and insights into various real-world applications.
Eventual next steps	We continue conducting similar training for the outgoing SS3 students of this school every year.

PARTICIPANTS	
Profiles and number of participants	• Staff from government (Teachers: 2 attendees) • School children (70 attendees from Age 16-18)
Name of participants' organizations	Fiwasaye Girls Grammar School, Akure, Ondo State
Gender ratio	100% Female : 0% Male
Who paid for the training?	This training was free.
Participant fee rate (if applicable)	N/A
Scholarships offered?	No

CONTENT	
Training components	• Basics of drone operation and safety. • Basics of drone technology. • Commercial applications of drones • Practical sessions on flying drones and capturing aerial data.

Training resources used	• Training Manual, DJI Phantom 4 pro v2 drone • Training Manual
Approaches and methods used	• The training was adapted to the specific audience of secondary school girls by simplifying complex drone technology concepts and using relatable, real-world examples that resonated with their interests, such as environmental monitoring and creative industries like photography and videography. We also incorporated interactive discussions to encourage curiosity and engagement. • The training was hands-on, with practical sessions where students not only learned the basics of drone operation and safety but also actively flew drones in a controlled environment. This provided a real-world feel for operating drones safely and confidently. • There were multiple opportunities for participants to put theoretical knowledge into practice. After learning about drone technology and commercial applications, students engaged in practical sessions where they captured aerial data, helping them understand how drones can be used for tasks like mapping, surveying, and content creation. This blend of theory and practice deepened their understanding and competence.