Educator's Workshop: Testing & Refining STEAM Learning Activities for Recreational Drones

Abstract/Agenda:

Fifteen educators selected through our application process will test and refine a range of activity ideas. Participants will make plans for facilitating STEAM (Science, Technology, Engineering, Art and Math) investigations using recreational drones in clubs, classrooms, and / or science fairs. Participants will also learn about ESIP projects and initiatives that provide learners with opportunities to apply skills in acquiring and using data.

AGENDA:

8:30	Welcome, introductions, ESIP overview & distribute assembled drones to participants
9:00	Intros to safety and documentation (B4UFLY app & pre-flight checklist)
9:15	Drone Aerodynamics 1: Goal: controlled flight and simple maneuvers.
	New pilots will be paired with experienced pilots.
10:00	ESIP Education sampler sessions (http://commons.esipfed.org/node/9250) (Three 10-minute talks with connections to drones)
10:30	Meeting-wide Break
11:00	Three more 10 minute talks (http://commons.esipfed.org/node/9250) (ESIP activities with connections to drones)
11:30	Drone Aerodynamics 2: Running simple investigations
	Model best practices for safety and documentation (always).
	UAV payloads and / or other activities for novices; Image gathering challenge for experienced folks.
	Share all suggested activity sheets and invite exploration, input, and feedback.
12:30	Lunch
1:30	Drone Aerodynamics 3: off-the-shelf and miniature DIY sensors
	Take your skills to the next level.
	Explore and imagine new activities.
3:00	Discuss the most effective way to help educators remain motivated and engaged.
	Assign responsibilities for testing activities.
	Develop consensus on best practices for activity instructions.
	Outline timeline and milestones for e-book.
4:40	Evaluations & wrap-up

Notes:

This is an all day workshop advertised to take place on Tuesday, July 19. We request a large room with around 20 chairs and a few tables, leaving us lots of room to fly and crash drones.

Attachments/Presentations:

Attachment	Size
📄 MND_ESIP_10min.pptx (http://commons.esipfed.org/sites/default/files/MND_ESIP_10min_0.pptx)	6 MB
📄 ESIP_Education_Barbieri_drones_Final.pptx (http://commons.esipfed.org/sites/default/files/ESIP_Education_Barbieri_drones_Final_0.pptx)	22.88 MB
📄 ESIP_2016.pptx (http://commons.esipfed.org/sites/default/files/ESIP_2016_1.pptx)	32.19 MB
📄 ESIP Modern Blanket Toss - Kirk Hogenson.pptx (http://commons.esipfed.org/sites/default/files/ESIP%20Modern%20Blanket%20Toss%20-%20Kirk%20Hogenson_0.pptx)	25.1 MB
📄 Drone Resources Catalog Presentation.pptx (http://commons.esipfed.org/sites/default/files/Drone%20Resources%20Catalog%20Presentation_0.pptx)	23.22 MB
📄 Drone Workshop Summer Meeting.docx (http://commons.esipfed.org/sites/default/files/Drone%20Workshop%20Summer%20Meeting_0.docx)	107.02 KB

Citation:

Educator's Workshop: Testing & Refining STEAM Learning Activities for Recreational Drones; 2016 ESIP Summer Meeting (http://commons.esipfed.org/2016SummerMeeting). ESIP Commons (http://commons.esipfed.org) , March 2016

Submitted by Ldahlman on 2016-03-30 08:36.

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🖨 Print (http://commons.esipfed.org/print/9109)

📄 PDF (http://commons.esipfed.org/printpdf/9109)

Details

Tuesday, July 19, 2016 - 08:15

2016 ESIP Summer Meeting (/2016SummerMeeting)

Session Type: Workshop (/session-type/workshop)

Expertise Level: Beginner (/taxonomy/term/260)

Accepted:

Tags

Keywords: Drone (/taxonomy/term/1963)

education (/taxonomy/term/429)

STEM (/taxonomy/term/2185)

Collaboration Area: Education (/collaboration-area/education)

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