Educator Advanced Training Program

The educators advanced training operations course introduces educators to the safety, tools, software, and applications of using remotely piloted aircraft systems (RPAS) in schools and classrooms. The instruction primarily consists of elaborate hands-on flight training with in-depth software instruction for indoor and outdoor group flight. Educators specifically obtain professional development on classroom integration for Grades 6-8 and Grades 9-12 using current lesson plans integrated into the Manitoba Curriculum, troubleshooting scenarios, cumulative project programming.

Course Outline

Topic 1 – Safety Awareness and the Multi-User Environment

Student safety is an educator's first priority. RPAS can present several dangers and and lose control either spontaneously or due to user recklessness. Prior to any flights, students should be aware of the dangers surrounding indoor and outdoor flight with engaging safety lessons.

Topic 2 – Pre-Flight Checklists

Pre-flight checklists are essential to ensure safety and reliability of hardware operation. During this topic, engaging lessons provide educators with student template checklists. The topic includes commonly overlooked items and metacognitive routine reflections to solidify classroom flight routines.

Topic 3 – Connecting the Tech

This topic will explore the types of connections required to run the hardware using Apple and Android tablets, Bluetooth remote controllers and three types of DJI hardware systems. The connections phase allow educators to elaborately explore hardware connections using the DJI Go 4 application and discuss how student connection routines are imperative for smooth operations.

Topic 4 – Flying Experience

Educators will obtain first-hand flight experience using the DJI Ryze Tello, DJI Spark, and DJI Mavic Pro. During this flight experience, educators explore flight controls, engaging educator lessons with vocabulary and skills tests, and flying challenges designed for students.

Topic 5 – In-Depth Software Instruction

This topic explores the software presets of the DJI Go 4 platform including specific student connections for all flight settings including controller configurations, battery settings, intelligent flight modes, and several other features.

Topic 6 – School Integration Grades 6-12

Lesson building across disciplines are integral to ensure instructional targets are met whilst engaging in flight and operation. School-initiated courses, frameworks for clubs, cumulative projects and core-instruction will be discussed with specific STEM-based lessons to reach cluster 0 outcomes in science especially.

Materials Required

All technology is provided including iPad Minis with integrated software and RPAS hardware. Educators who wish to use their own tablets or mobile phones for connecting are encouraged to download the DJI Go 4 application and to register online.

Affiliation

The educator advanced training course is run in affiliation with M3 Aerial Productions© as a component of the advanced flight skills workshop.

Instructor

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