

FPG-9 (Foam Plate Glider 9")

The best way to teach any lesson is by giving the students "hands-on" experience. The FPG-9 is the perfect tool for educating young pilots about the science of flight. It is suitable for students from elementary all the way through high school.

It is very simple and cost effective to build. All the required parts can be purchased from your local Walmart for about 7 cents per glider (in bulk).

Larger, more expensive and prettier model gliders can be purchased from hobby stores but they don't have the same learning potential. This glider includes flight control surfaces like a real airplane. An experience instructor could teach the students about the usage of rudder and elevons or better yet, ask the students what how they think the glider would react if we moved a rudder or elevon. Ask them to theorize the control reaction before they fly it. This is true STEM learning, afterall, the Wright Brothers had no flight instructor.

A penny is needed to keep the glider in balance. Ask the students if they think it would fly better without the penny. This is a great lead-in for a lesson in Center of Gravity.

The FPG-9 is a standardized template. After building the first one, you could offer the students another 9" foam plate and see if they could improve upon the original design. STEM never sleeps.

http://1ef2c1ael6q32f64freokqsm.wpengine.netdna-cdn.com/wp-content/uploads/2016/12/Intro_FPG-9_final.pdf

<http://www.amaflightschool.org/sites/default/files/FPG9template.pdf>

<http://amaflightschool.org/video/fpg-9-foam-plate-glider>