"STEAM" Pilot Program at Belle Sherman





For the last six weeks, 18 second-grade students at Belle Sherman have been learning all about flight in a STEAM (Science, Technology, Engineering, Art and Mathematics) pilot program called, "How do Things Fly?" or as the students quickly took to calling it, "Flight Club."

In the program created jointly with Alan Blankstein of the Hope Foundation, IPEI, local artist Stiller Zussman, classroom teachers Erin Buchanan and Ashley Paolangeli, and two engineering students from Cornell University, students learned all about flight and its guiding principles.

The participating students explored drag, thrust, lift, and weight through a number of inquiry-based, cooperative and engaging learning experiences that emphasized both scientific and design processes and art. Students also spent time studying bird biology and examined how the form of wings and feathers aid the function of flight. The students were tasked to design and build a glider or plane using their knowledge of the principles of flight. This was a lengthy endeavor including many days of design, construction, testing, redesigning and building—all to get a final product, a plane that flew.

The program culminated with an event in which each student presented their planes to family and friends. They described the reasoning behind their designs and gave a brief flight demonstration.