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The aerospace engineering challenge.

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Summary: The authors developed The Paper Plane Challenge as one of a three-part response to The Aerospace Engineering Challenge. The Aerospace Engineering Challenge was the second of three multi-part activities that they had developed with the teachers during the year. Their aim was to introduce students to the exciting world of engineering, where they could apply their learning of mathematics (measurement and geometry), science (force), and technology (design) to solve real-world problems. Students' appreciation and application of design processes underpinned the problem-solving activities throughout their STEM program. This article describes how the authors introduced design processes, worked with the students to develop the problem (explore; design, build, and test a paper airplane; redesign, rebuild, and retest), and challenges they encountered along the way. (ERIC)

Classification: M52 D82

Keywords: modeling; problem solving; aerospace engineering; activities

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