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## Does blended learning work?

by Thomas Arnett

When we talk to education leaders about blended learning, we often hear the question, “Does it work?” What they want to know is, “If I fund a blended learning initiative or implement a blended learning program in my schools, can I be confident that it will improve student learning?” Typically, these education leaders can see the potential that blended learning has to enable student-centered learning and improve student outcomes. Yet at the same time, given the unimpressive track record of many past tech-rich school initiatives, they want more assurance that results will be different with blended learning.

So what is the answer to this question? Well, it’s complicated. Today, a growing number of schools are implementing blended learning to achieve [measureable gains](#) for their students. But not all schools that are going blended are seeing worthwhile results. So does blended learning improve student outcomes? To answer that question, I think it is insightful to consider an analogous question. Do machines with wings fly?

Today, it’s obvious that wings enable flight. We have almost a century of aviation history demonstrating that fact. Yet, although wings are obviously important, the presence of wings alone is not sufficient to guarantee flight. Humans were putting wings on machines for millennia before figuring out how to get them to lift off the ground. Wings couldn’t produce flight until we figured out how to give them the right shape, size, weight, and configuration; and engineers and scientists today continue to improve their understanding of wing design.

Similarly, the presence of technology in a school does not guarantee improvements in student learning. Blended learning models that work are designed and implemented according to our current best understand of what it takes to make them successful; and schools that use blended learning are still discovering new ways to configure their models in order to produce stronger results.

We also have to admit that just as wings are not the only way to achieve flight, blended learning is not the only way to achieve student-centered learning or positive academic outcomes. People were flying in balloons long before airplanes; and shortly after the invention of airplanes, people also figured out how to fly using rockets and helicopters. Similarly, many schools were producing strong student learning outcomes long before blended learning. In addition, some schools pursue student-centered instruction with exceptionally low student-to-teacher ratios. What blended learning offers compared to these forms of instruction is an effective and budget-conscious way to personalize learning. The aviation analogy is insightful here as well. Although planes are not the only way to fly, they allow for speed and maneuverability that have never been possible in balloons.

Yet, rather than framing blended learning as an instructional model that competes with other instructional models, we should recognize that different instructional methods are best suited to different circumstances. Balloons are best for high-altitude, low-speed flight. Helicopters are best for landing without a runway or maintaining a stationary position in the air. Rockets are best if you need to leave the Earth’s atmosphere. Similarly, schools should

use blended learning in combination with other instructional approaches and align each approach with the jobs for which it is best suited. For example, Summit Public Schools uses [blended learning in conjunction with project-based learning](#) to personalize instruction for students. Similarly, Anthony Kim recently wrote an insightful [blog](#) explaining how schools can use computer-based instruction in combination with small-group instruction and project or group instruction to address students' various learning needs. The very term "blended learning" connotes that a blend of online and face-to-face instruction is important for supporting the different aspects of learning.

Lastly, to understand when blended learning works, it is important to note that just as wings are not the only important components of an airplane, software and devices are not the only important parts of an effective blended learning model. In addition to wings, planes need engines to give them thrust; landing gear to help them land and take off; rudders, flaps, and ailerons, to give them control; and a pilot to coordinate all of these subsystems. Similarly, high-quality blended learning requires sufficient Internet bandwidth, appropriate physical facilities, strong classroom procedures and culture, and, most importantly, good teachers.

So does blended learning work? The real answer is "it depends." Blended learning can be a powerful enabler of student-centered instruction, which in turn can produce strong student learning outcomes. Many schools today are testing and refining their blended learning models in order to figure out how to achieve increasingly stronger student learning results. The success of any blended learning program, however, depends on how well school leaders design and implement it with clear goals in mind and by taking into account important elements such as teachers, facilities, curriculum and culture. The forthcoming book, [Blended](#), by Michael Horn and Heather Staker, provides an incredibly valuable guide to help people in the field bring all of these important components together to create successful blended learning.



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Thomas' research focuses on the changing roles of teachers in blended learning environments and other innovative educational models. He also examines how teacher education and professional development are shifting to support the evolving needs of teachers and school systems.