

Disruptive Innovation in Practice

When integrating technology, course corrections are unavoidable

Blended: Using Disruptive Innovation to Improve Schools

By Michael B. Horn and Heather Staker

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As reviewed by Mark Bauerlein

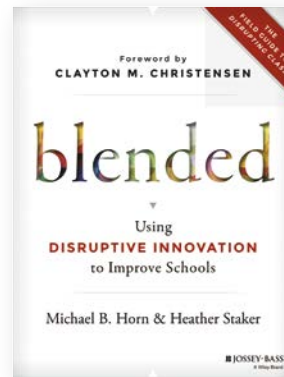
When in the 1990s computers became big business for schools and technology providers, a few skeptics such as Todd Oppenheimer (author of *The Flickering Mind*) urged caution and thrift, marshaling evidence of hype and waste in the purchase and use of tools in the classroom. Enthusiasts of digital instruction usually ignored them and proceeded with statewide laptop programs, lessons based on blogs and wikis, and other novelties in the digital coming. They had the momentum of history on their side, plus parents who wanted the latest enhancements for their kids and politicians who saw in cutting-edge technology a political winner, so why bother with naysayers?

Wiser minds, however, took the skeptics more seriously and identified practical hindrances, such as inadequate coordination throughout a school. Recently, a more sophisticated explanation has emerged, one that casts those deficiencies not as signs of failure but as unavoidable steps in the course of reform. It derives from “disruptive innovation,” the concept in education at the present time. Among other things, the theory states that when a new technology or method comes along, it is always less productive and less economical than existing ones. In the early 19th century, for instance, steamships performed worse than sailing vessels, and their advantage appeared limited to lakes with no wind and rivers with

strong currents. Steam power improved, though, until it surpassed wind power everywhere, and those invested in sail-based commerce who didn’t adapt disappeared.

The example typifies disruptive innovation, and it applies to digital learning as well. When a breakthrough arrives, it doesn’t evoke universal adoption. Initial uses are “downmarket,” that is, geared to simple needs and impoverished settings, such as a computer in a classroom that lacks reference books. But as the innovation advances, it moves “upmarket,” its uses expanding to complex tasks in resource-rich milieus. Some pathways succeed, others falter. The proper approach is to correct and refine, to experiment and revise, develop the good and discard the bad.

Michael B. Horn and Heather Staker’s *Blended: Using Disruptive Innovation to Improve Schools* is a primer in this second phase of disruption. (Horn is co-author, with Clayton M. Christensen and Curtis W. Johnson, of *Disrupting Class: How Disruptive Innovation Will Change the Way the World Learns*, the cardinal expression of disruption theory in education; Staker is senior research fellow at the Christensen Institute.) The primary advent has already transpired, and as countless teachers and school officials across the country try different technologies and deliveries, a filtering process should follow. We no longer need debate the merits of digital vs. nondigital instruction: “Schools have no choice but to confront technology.” Instead, we must determine how



best to integrate it, when and where and in what proportions.

The first problem, Horn and Staker write, stems from people “with an appetite for the dazzling technology” who end up merely “cramming more devices, screens, gadgets, and software into students’ and teachers’ already noisy lives.” Time and again, edu-

cators have tended to “get excited about a product” instead of defining specific educational and logistical goals they aim to meet. In fact, Horn and Staker report in their review of more than 150 programs across the states,

Nearly without exception those leading the most successful programs avoid the trap of “technology for technology’s sake” by beginning with a clearly articulated problem or goal that *does not reference technology* [emphasis in original].

The best programs, they continue, generally follow a hybrid practice, one that combines online with face-to-face instruction, and teacher control with student control over the learning process. Hence the title *Blended*, a term marking genuine integration of human and technological resources, not just the layering of one on the other.

In blended learning, some study takes place at home and some on a campus, be it a school or a learning center. Digital and traditional methods complement one another, for instance, students leaving a teacher-led classroom for an hour in the computer lab devoted to exercises that determine

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how well students assimilated the classroom content. Blending may happen in a technology-rich school or in one with few tools, as long as the tools are a significant part of instruction. All the advantages of personalization are pursued, too, as when students slow down or speed up an online presentation, but a critical mass of teacher supervision is maintained.

In successive chapters, the authors distinguish the features of blended learning, highlight strong programs, and explain the keys to success. We have a taxonomy of models (“Enriched Virtual,” “Flex,” etc.), strategies (“Flipped Classroom,” “Individual Rotation,” etc.), and structures (“blended-learning teams” divided into “Functional,” “Lightweight,” “Heavyweight,” and “Autonomous”). Tactical questions are posed—“Should leaders focus on sustaining or disruptive rally cries?”—and diagrams provided (one on “Station Rotation” with “Teacher-led

instruction,” “Collaborative activities and stations,” and “Online instruction” components). The authors give advice to school leaders, such as urging them to adopt digital programs first for “non-consumption opportunities,” that is, for activities a school cannot otherwise provide (good results may convince everyone that they may benefit existing activities as well). One chapter ranges from large issues such as the shift of school architecture to modular spaces to small instructions such as ‘use one outside provider’ per course or subject.

As you can tell, *Blended* is a book for school officials in the process of change. They feel the pressures of digital innovation, uncertain funding, and stalled student performance, but they haven’t the techno-knowledge and managerial expertise to proceed sagely. Horn and Staker guide them forward—Chapter 10 bears the title “Discover Your Way to Success”—outlining how to create the right team, match relevant models

to different student populations, and arrange proper physical spaces for various programs. Troubling questions such as those raised when students take control of their own learning go unaddressed, and at times their version of “factory-model” schools slides into caricature (“Top-down, teacher-centered, monolithic instruction is an uninspired match for generating the entrepreneurial, inquisitive problem solvers that today’s employers are paying top dollar to recruit”). But in the authors’ view, the current phase of disruption calls for implementation, not deeper reflection. Let’s get on with the process, they imply, and if we find that teachers aren’t blending the way we expected or students aren’t motivated as we predicted, let’s self-correct and try again. That’s what shrewd disrupters do.

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