

## What Is the Current Need for Looking at New Models for Schooling?

The COVID-19 pandemic has led individuals across the nation to consider what changes will occur in the immediate and long-term future. The same wonderings apply to the K-12 space, as students, families, and educators ponder the changes schools have already implemented during statewide closures and those they will make when schools eventually reopen and beyond.<sup>1</sup> Much speculation focuses on how to keep students and staff safe via physical distancing while also reopening school buildings.<sup>2</sup> Other concerns relate to whether online and distance learning procedures will become more commonplace.<sup>3</sup>

### Major Questions for Reopening Schools

- When should schools reopen?
- For which segments of students and staff (if not everyone) should schools reopen?
- What health and safety measures should schools adopt on reopening?

Source: McKinsey and Company<sup>4</sup>

The Centers for Disease Control and Prevention (CDC) recommend that schools “[e]ncourage social distancing through increased spacing, small groups[,] and limited mixing between groups, if feasible.”<sup>5</sup> Other solutions proposed by organizations such as the World Health Organization (WHO), United Nations Children's Fund (UNICEF), and International Federation of Red Cross and Red Crescent Societies (IFRC) include:<sup>6</sup>

- Use of online and distance learning strategies;
- Staggering the beginning and end of the school day;
- Cancelling assemblies, sports games, and other events that create crowded conditions;
- When possible, creating space for children’s desks to be at least one meter apart; and
- Teaching and modeling personal space and avoiding unnecessary touching.

As districts grapple with potential solutions—such as staggering student and staff schedules, opening school for some students (e.g., elementary) but not others, and reexamining attendance policies and academic calendars—it is important to remember that the best solution for one community may not be best for all communities.<sup>7</sup> Ultimately, district and school leaders should make decisions that account for “public health guidance, the law, [their organization’s] mission and culture, and [their] community’s safety.”<sup>8</sup> However, to meet the challenges of COVID-19 and reopen schools safely, it is probable that districts and schools will deploy some form of hybrid learning or an unconventional schedule.<sup>9</sup> At the same time, leaders need to consider what activities will be most effective in-person and which can be best translated to an alternative delivery format.<sup>10</sup>

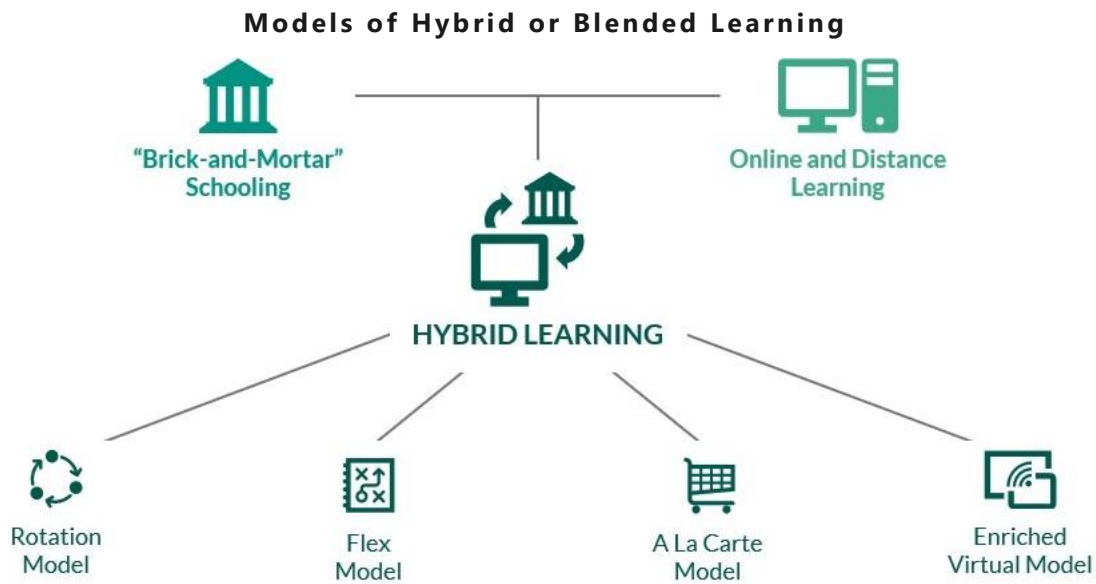
### Looking at the Post-COVID School

“A different approach would make more sense. If schools systematically combine digital and face-to-face activities, then in the event of a crisis, they will only have to adjust the relative amounts of in-person and distance learning, instead of having to implement radical changes. Many seem to think that learning at home is an entirely new concept, but students have always done assignments at home in the evenings and on weekends. And, teachers already use online activities in the classroom. The post-COVID school will have to remain partly digital, because learning at home has always been part of a child’s schooling, and that will continue to be the case.”

Source: Blog on Learning and Development<sup>11</sup>

## What Are Hybrid Learning Models?

Hybrid learning models go by a variety of names—such as blended learning and mixed methods learning—though at their core, they represent some fusion of in-person and online learning activities.<sup>12</sup> Essentially, students participating in hybrid learning models complete self-guided instruction via online or distance platforms for some of the time and attend classes or activities at a physical school campus for the rest of the time. Both modalities of learning complement one another to provide an integrated and seamless educational experience.<sup>13</sup>



MODEL	DESCRIPTION
<p><b>Rotation Model</b></p>	Students rotate on a fixed schedule or at the teacher's discretion between learning modalities. Modalities might include online learning, small-group or full-class instruction, group projects, individual tutoring, and pencil-and-paper assignments. The students learn mostly on the brick-and-mortar campus, except for any homework assignments.
<p><b>Flex Model</b></p>	Online learning is the backbone of student learning, even if it directs students to offline activities at times. Students move on an individually customized schedule among learning modalities. The teacher of record is on-site, and students learn mostly at the brick-and-mortar campus, except for any homework assignments. The teacher of record or other adults provide face-to-face support on a flexible and adaptive basis through activities such as small-group instruction, group projects, and individual tutoring. Some iterations have substantial face-to-face support, whereas others have minimal support.
<p><b>A La Carte Model</b></p>	Students take one or more courses entirely online to accompany other experiences at a brick-and-mortar school. The teacher of record for the "a la carte" courses is the online teacher. Students may take courses either on the brick-and-mortar campus or off-site. This differs from full-time online learning because it is not a whole-school experience. Students take some courses "a la carte" and others face-to-face.
<p><b>Enriched Virtual Model</b></p>	Students have required face-to-face learning sessions with their teacher of record and then complete their remaining coursework remotely from the face-to-face teacher. Online learning is the backbone of student learning when the students are located remotely. The same person generally serves as both the online and face-to-face teacher.

Source: Clayton Christensen Institute<sup>14</sup>

## What Are the Impacts of Hybrid Learning Models?

The research base examining the impact of hybrid learning models on student outcomes remains quite limited, despite indications of increased adoption. Moreover, most empirical studies focus on the effects of hybrid learning models on postsecondary students, as opposed to students in K-12 education.<sup>15</sup> Some researchers hypothesize that the modifications to teaching and learning and investments in hardware and software required to conduct well-controlled, randomized studies of hybrid learning models may simply prove less feasible in a K-12 setting.<sup>16</sup> Nonetheless, districts and schools seeking objective evidence of the effectiveness of hybrid learning models will find relatively few empirical studies on which to rely.<sup>17</sup>

With respect to academic achievement, the effects of hybrid learning models are mixed at best.<sup>18</sup> A 2010 meta-analysis published by the U.S. Department of Education initially aimed to examine empirical studies of online learning in K-12 education. Finding an unexpectedly limited research

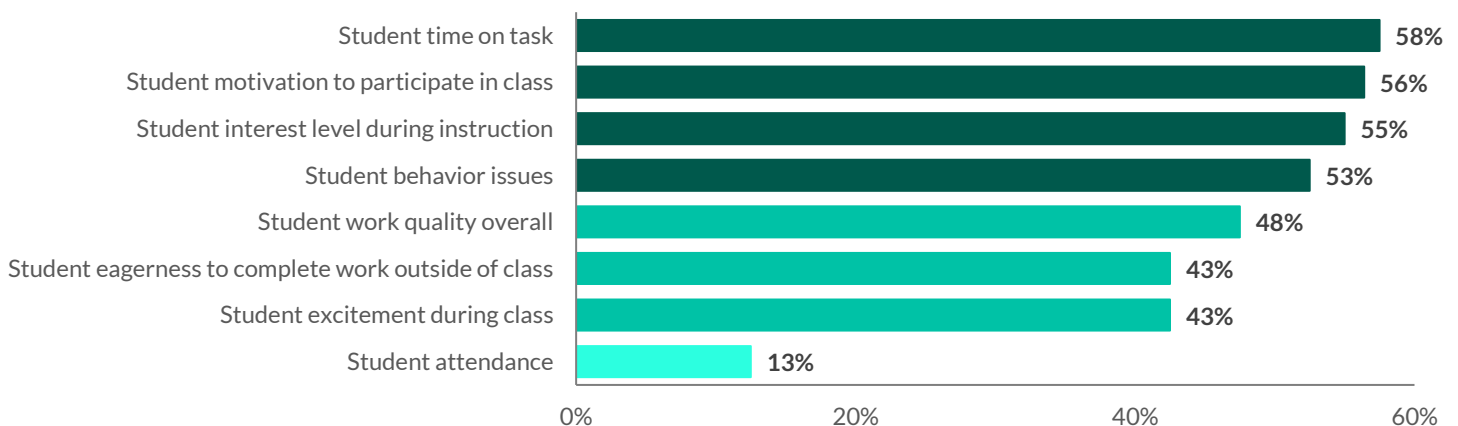
base, the researchers expanded the review to include empirical studies of postsecondary, in addition to K-12, students and hybrid, in addition to online-only, learning models. Of the 45 empirical studies published between 1996 and 2008 that met the researchers' criteria, only five explored effects on K-12 students, and 23 compared hybrid learning models with face-to-face instruction. Across age groups, the researchers found that blending "online and face-to-face instruction, on average," led to significantly "stronger learning outcomes than did face-to-face instruction alone."<sup>19</sup> However, the researchers cautioned that, compared with face-to-face instruction, hybrid learning models tend to "involve additional learning time, instructional resources, and course elements that encourage interactions" among students.<sup>20</sup> Therefore, the possibility exists that other "practice variables" account for the positive learning outcomes observed instead of (or in addition to) the learning model used.<sup>21</sup> Because of the review's reliance on empirical studies of postsecondary students, the researchers also emphasized that the findings' applicability to K-12 settings remains unclear.<sup>22</sup>

A 2019 meta-analysis published in the *International Journal of Mobile and Blended Learning* sought to shed additional light on that particular question by reviewing subsequent empirical studies of hybrid learning models in K-12 education. Identifying only 11 suitable empirical studies published between 2009 and 2017, the researchers noted that a limited research base still poses a challenge. Further, the nine empirical studies that measured academic achievement drew mixed conclusions. Although seven empirical studies found that hybrid learning models improved academic performance, the results only proved significant in four cases. An eighth empirical study observed a combination of positive and negative effects associated with hybrid learning models, while the ninth empirical study actually determined that the *control* group fared significantly better.<sup>23</sup>

**Empirical literature offers even less insight into the impact of hybrid learning models on student engagement, in general, and student attendance, in particular.** For instance, the U.S. Department of Education meta-analysis only considered academic outcomes.<sup>24</sup> While the *International Journal of Mobile and Blended Learning* meta-analysis did aim to explore both academic and non-academic outcomes, only two of the 11 empirical studies included such measures. In both empirical studies, students in hybrid learning models proved more engaged than students receiving only face-to-face instruction. Student attendance did not appear among the non-academic outcomes examined.<sup>25</sup>

Though not an empirical study, a 2013 analysis of the effects of hybrid learning in Idaho featured teacher perspectives on various topics, including student engagement. Whereas 43 percent or more of the 145 Idaho teachers surveyed thought that other aspects of student engagement strengthened with hybrid learning, only 13 percent felt that student attendance improved after the model's introduction.<sup>26</sup>

## Share of Idaho Teachers Agreeing Hybrid Learning Improved Student Engagement Measures



Source: Multiple<sup>27</sup>

## What Do Unconventional Structures Look Like?

Hybrid learning “provide[s] the assurance that learning can continue even if there are reasons why students [cannot] come to school,” such as in the context of recent school closures.<sup>28</sup> Toggling between formats will allow districts to better adapt to a “worst case scenario” in which a subsequent wave of COVID-19 forces additional school closures.<sup>29</sup> However, the logistics of balancing online learning and traditional formats are complex.<sup>30</sup>

In addition to continued leveraging of online and distance learning, districts are considering alternatives to typical scheduling and in-person attendance. Such alternatives include returning only one group of students (e.g., young students learning to read, juniors and seniors close to graduation) while the rest continue exclusive remote learning and staggering start and passing times.<sup>31</sup> Other options include splitting students into shifts that physically attend school on different days (leaving one day a week with no students present on campus), such as:<sup>32</sup>

- A one-day rotation, in which a quarter of students return to school buildings one day a week;
- A two-day rotation in which all students receive two days of at-school instruction each week; and
- “A” and “B” weeks, where half of all students go to the school building for four days in a row and learn from home the following week

### Sample Alternating Schedule

	GROUP A	GROUP B
MONDAY	On-campus	Distance learning
TUESDAY	Distance learning	On-campus
WEDNESDAY	On-campus	Distance learning
THURSDAY	Distance learning	On-campus
FRIDAY	Distance learning	

Source: Palo Alto Online<sup>33</sup>

Indeed, alternating instructional time between multiple shifts of students seems to be the most common option being discussed by education agencies to reopen school campuses while also adhering to guidance on physical distancing at this time. Under such scenarios, the online or distance component of hybrid learning would substitute for the decreased in-person learning time.<sup>34</sup> However, decisions around the specific balance of time spent in school versus time spent at home completing online or other distance learning will depend on several factors, such as individual districts’ ability to re-provision spaces for social distancing, the volume of COVID-19 incidences in the local community, and stakeholder buy-in to continued distance and/or renewed brick-and-mortar learning in the upcoming months.<sup>35</sup> **Districts must understand that no perfect option exists for selecting or implementing a new or unconventional model through which to utilize hybrid learning and that any decision in this regard must follow their state educational agency’s guidance and consider feedback—both positive and negative—from community stakeholders.**<sup>36</sup>

## Schedule and Facilities Reorganization Strategies to Meet Public Health Guidelines



### SMALLER CLASS SIZES

Districts should consider reduced class sizes. Classes of 25+ students in a small classroom pose obvious risks to health and safety, but classes of 12-15 students may make it possible to maintain physical distancing. Providing additional spaces (e.g., portable classrooms) or using existing spaces differently (e.g., gymnasiums) can help with crowding and class sizing.



### SPLIT SCHEDULING

Alternating student attendance between different days of the week or times of the day may offer schools a way of limiting the number of students physically present in the building at any given time. Knowing split scheduling may cause disruption for parents and guardians, schools should consider offering after-school care with safety protocols for those most in need.



### STAGGERED ACTIVITY TIMING

Districts should consider modifying transportation to provide staggered arrival times and multiple arrival locations to limit large gatherings of students. Meals should also be staggered throughout the day, and schools should consider having students eat in classrooms with appropriate protocols to keep the classroom clean.

Source: American Federation of Teachers<sup>37</sup>

## Endnotes

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