

# How Should Massachusetts Reopen Its K–12 Schools in the Fall?

## Lessons from Abroad and Other States

By Max von Schroeter, Nina Weiss, and Thomas O'Rourke

A foreword by David S. Clancy and Dr. John G. Flores



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Pioneer Institute is an independent, non-partisan, privately funded research organization that seeks to improve the quality of life in Massachusetts through civic discourse and intellectually rigorous, data-driven public policy solutions based on free market principles, individual liberty and responsibility, and the ideal of effective, limited and accountable government.



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## Foreword

By David S. Clancy and Dr. John G. Flores

As co-authors of Pioneer’s June 11 report, *Class Dismissed: Massachusetts’ Lack of Preparedness for K–12 Digital Learning During COVID-19*, we appreciate the opportunity to introduce and endorse this new report’s findings and recommendations.

Individual teachers, administrators, and parents made tremendous efforts to continue educating the Commonwealth’s children between March and June of this year. But no amount of dedicated individual effort could have overcome the fundamental challenges addressed in our June report: weak guidance to districts from the Department of Elementary and Secondary Education (DESE) against a backdrop of deficient knowledge and sophistication statewide with regard to virtual learning. Digital education has been empirically proven to be most successful when schools prepare and follow best distance learning practices. Its implementation and benefits, including as a complement to in-person learning and as an option for in-person learning when circumstances warrant, have been proven to be reliable and effective in school systems around the world. But it is an unfortunate fact that Massachusetts lags far behind many states in its commitment to this growing field. The Commonwealth lacks even the minimum technological infrastructure for virtual learning, as exemplified by districts scrambling to obtain electronic devices and internet connections during the school closure.

The result was a slow transition to a new educational mode, which, upon arrival, was inconsistent across districts and inadequate in various ways. The closure commenced on March 17, but under the initial March 26 DESE guidance, for weeks schools merely reinforced already-taught material. The DESE did not instruct schools to begin advancing the curriculum until its April 24 guidance. Even then, schools were given until early May to begin doing so. And throughout, schools taught for only half the day, under guidance from the state that listed various potential methods for remote instruction but provided little specificity as to how to implement them.

It is encouraging that Governor Baker and the DESE have described a fall 2020 return to brick-and-mortar schooling—with appropriate health measures to maximize safety—as a significant priority, recognizing that the Spring 2020 status quo must change, and that it is damaging to deny young people

direct interaction with peers and teachers for lengthy periods of time. These recognitions are important, and should remain at the forefront of discussion. The present challenge is how to implement this much-needed return to school, optimally balancing the importance of in-person schooling with the countervailing importance of protecting against the virus. All constituencies should be doing their best to aid in this determination. The entire Massachusetts school community must be accountable for ensuring that all our students are achieving at their highest level of excellence and ability regardless of what learning model is instituted in the fall.

To that end, the following paper contributes important insights, based upon careful review of other countries that have already successfully reopened their schools. The paper’s key recommendations are:

1. *Massachusetts should greatly improve its online-learning infrastructure and capabilities, during the course of this summer and beyond.* Online instruction may, as in the countries studied, be a material part of this fall’s educational structure.

Indeed, it may be crucial to *facilitating* our return to in-person learning. For example, to accommodate social distancing requirements in school buildings, cohorts of students may need to “rotate” between school and home, and high-quality online learning capability will be necessary for that rotation to work. Several recent Pioneer papers are relevant to this first recommendation. An April 20 report—*Shifting to Online Learning in the COVID-19 Spring*—made five recommendations for facilitating online learning. A June 4 report—

*Shifting Special Needs Students to Online Learning in the COVID-19 Spring*—offered similar practical guidance with regard to special needs students in particular. And our June 11 paper recommends specific enhancements to the DESE’s existing online learning guidance, in part based on principles developed by the U.S. Distance Learning Association. Among them: that the DESE should “provide clearer guidance to schools [concerning methods of remote learning], not simply listing menus of options, but providing direction, and expressing preferences, among those options.”

**Digital education has been empirically proven to be most successful when schools prepare and follow best distance learning practices.**

2. *Massachusetts has directed each school district to prepare a plan for each of three potential educational models: entirely in-person; entirely online; and hybrid. However, Massachusetts should publish detailed criteria to guide the initial choice of model, and potential transitions between models.* Such criteria are crucial; they will ensure that choices between models are well-grounded and sufficiently transparent to permit public review and input. The existence of an excellent plan for in-person learning will be of little value if schools lapse into a remote learning situation akin to Spring 2020, and do so on grounds that are unclear, unsound, and/or inadequately vetted by the public.
3. *Current DESE guidance encourages the separation of groups of students into cohorts, but DESE should provide more detailed guidance on how to do so, especially in middle and high school, where student groupings typically shift a great deal during the day.* The new paper provides useful perspective from other countries, particularly Denmark, on this point.
4. *DESE encourages districts to survey families this summer, but the guidance on this issue should be more robust.* In particular, the paper correctly advises DESE to guide schools toward more focused fact-gathering concerning remote learning. For example, the recommended survey subject matters do not include questions on families' practical ability to engage in remote learning (e.g., the availability of adults in particular households to supervise remote learning). The surveys should be designed to fully identify problem areas now, so they can be resolved before school begins.
5. *With support and guidance from the DESE, school districts should be creative and flexible in their use of space to facilitate social distancing.* Whether schools adopt the three-foot social distancing minimum suggested by the DESE (and supported by the World Health Organization), or something greater (as in Denmark), achieving that distancing will be a practical challenge. To meet it, schools will need to be resourceful. The new paper offers concrete ideas from the countries surveyed, which, as detailed within, took steps such as securing space in public buildings not normally used for schooling and teaching outdoors where possible.

The new research paper's recommendations are highly valuable. We hope that they, as well as those in Pioneer's other recent papers referenced above, are considered in the ongoing planning, and that they contribute to the achievement of a maximally productive—and healthy—2020–2021 academic year.

## About the Authors

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# Lessons from Abroad and Other States

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## Introduction

Since Governor Baker closed Massachusetts' schools this spring, students, parents, and educators have speculated about what returning to school will look like in the fall. Although Massachusetts public schools remained closed all spring, in some countries, including Finland, Denmark, South Korea, and Japan, schools returned to in-person learning. Alternatively, some of these countries and U.S. states, such as Florida, implemented robust online learning programs when in-person classes were not possible.

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In light of the June 25th release of the guidance for reopening by the Massachusetts Department of Elementary and Secondary Education (DESE) and the experience of these international school reopenings, this paper proposes that for the fall, Massachusetts should prioritize improving remote learning capabilities, specifying criteria by which schools should approach in-person, remote, or hybrid instruction mod-

els, refining proposals related to cohort learning, investigating supplementary methods of communication with students and families, and adapting physical locations where students learn to conform to physical distancing requirements. Addressing these gaps is crucial not only for a successful return to in-person learning, but also for ensuring that the state is prepared for any subsequent outbreaks of coronavirus that could emerge in the coming months.

## The Massachusetts Situation

On March 15th, Governor Baker announced the closure of Massachusetts' K–12 public schools and recommended a shift to online learning.<sup>1</sup> This decision, echoed by states across the U.S. and nations around the world in response to the coronavirus (COVID-19) pandemic, was initially planned for three weeks but ultimately lasted for the rest of the academic year here in Massachusetts.<sup>2</sup> The state is currently in the third of four phases of reopening, and key health metrics that have been informing the debate about whether to progress to the next stage of reopening remain promising.<sup>3</sup> It is important

to acknowledge, however, that other states are experiencing new outbreaks and may require different strategies for reopening schools.<sup>4</sup>

Informed by this outlook, on June 25th, Commissioner of Elementary and Secondary Education Jeffrey Riley released his plan outlining the state's initial guidelines for reopening schools come fall. The stated goal of this guidance is to ensure "the safe return of as many students as possible to in-person school settings, to maximize learning and address our students' holistic needs."<sup>5</sup> While most of the guidance provided by the state concerns specific requirements for resuming in-person learning, school districts are also required to provide the state with detailed plans outlining their procedures for handling all three potential scenarios for the months ahead. The scenarios, as determined by DESE, include "in-person learning with new safety requirements, a hybrid of in-person and remote learning, and the continuation of remote learning."<sup>6</sup>

**The stated goal of the DESE guidance is to ensure the "safe return of as many students as possible to in-person school settings, to maximize learning and address our students' holistic needs."**

DESE's reopening guidelines acknowledge that the scientific literature related to COVID-19 is "growing rapidly."<sup>7</sup> That said, some early findings suggest that transmission in schools may be less of a risk than transmission in other settings.<sup>8</sup> Additionally, studies indicate that certain preventative measures – including hand washing, wearing a face covering, cleaning high touch surfaces, and physical distancing – can reduce the spread of coronavirus.<sup>9</sup> In light of this, the guidelines for school reopening require that:

- Students in second grade and above and all staff members wear face coverings during the day.<sup>10</sup>
- Schools create layouts that enable for at least three feet of physical distancing between all members of the school community.<sup>11</sup>
- Schools attempt to keep students interacting with smaller and consistent cohorts, particularly at the elementary school level and "to the extent feasible" for middle and high schools.<sup>12</sup>
- Families and caregivers screen children for COVID-19 symptoms before sending them to school, but temperature checks at schools will not occur.<sup>13</sup>

- All school community members “exercise hand hygiene (hand washing or sanitizing) upon arrival to school, before eating, before putting on and taking off masks, and before dismissal.”<sup>14</sup>
- Schools “designate a COVID-19-related isolation space that is separate from the nurse’s office or other space where routine medical care is provided.”<sup>15</sup>
- Schools encourage students and staff to get vaccinated for seasonal flu and ensure that students are up to date on all other immunizations.<sup>16</sup>
- Schools have adequate quantities of PPE in line with previously issued DESE guidelines and engage in other thorough cleaning and sanitizing protocols.<sup>17</sup>

Analyzing these guidelines through the lens of international examples where schools did reopen this spring can lend insights into whether the procedures outlined by DESE seem appropriate. Further, focusing on how different entities conducted online learning can inform how to best prepare for DESE’s hybrid and remote scenarios for the fall, both of which involve online components. The Commonwealth’s public schools have previously scored on par with the world’s leading countries in terms of academic achievement, but how do our guidelines for reopening compare?<sup>18</sup>

## Case Studies: The spring and plans for the fall

In sharing details from a handful of international and domestic examples, we do not intend to suggest that all actions observed abroad or in other states are directly applicable in Massachusetts. Rather, we recognize that there will be cultural and institutional differences between all school systems and places. Moreover, in all the examples referenced it remains difficult to isolate the effects of school reopening with respect to nationwide infection rates, as schools have reopened within the context of easing social and economic restrictions. In point of fact, the total number of positive cases in Finland, Denmark, South Korea, and Japan combined represent only about half of total confirmed cases in Massachusetts, despite having a combined population about 27 times greater than the Bay State. Our goal in sharing approaches outside Massachusetts is to expand the horizon of discussion, which in our state is too often restricted to the positions of special interests. Our hope is that some of these approaches may stimulate thinking or, where appropriate, be adapted by Massachusetts’ public and private schools.

### Finland

On March 30, Finland’s national government issued a mandate resulting in the closure of all places of education, leaving school districts to continue their coursework remotely. But, on May 14, almost all of Finland’s 907,426 primary and secondary

school students returned to the classroom before the start of summer break.<sup>19</sup> To do so, teachers and government officials considered a variety of different health and safety protocols that may become the new normal moving forward.

As with nearly every country that returned to in-person instruction, students were required to adhere to strict social distancing measures and robust hand washing.<sup>20</sup> Other safety measures include staggered arrival times, limited use of playground equipment, and restrictions on large gatherings, such as graduation ceremonies.<sup>21</sup> It must also be noted that the Finnish National Agency for Education, the federal body issuing reopening guidelines, has struck a balance between

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issuing rules that school districts are required to adhere to and, offering a number of non-binding recommendations for schools to consider. For example, specific aspects of policies are being left to the discretion of each school district, such as how many students are allowed per square foot, but is offering specific advice with respect to other issues, namely, eating lunches in the classroom, hand washing upon entering the school, and quarantine policies in the event of an infection. Unlike guidance espoused by the U.S. Centers for Disease Control and Prevention (CDC), Finnish authorities have recommended that teachers and students do not wear face coverings in schools.<sup>22</sup> The Finnish Institute for Health and Welfare offered such advice based on studies suggesting that “the face mask does not protect the wearer from virus infection. Improper use of the mask can even increase the risk of coronavirus infection.”<sup>23</sup>

This return to in-person learning follows a fairly successful period of online learning in Finland. Even before the coronavirus pandemic emerged, online learning was well established. Educators were experienced in using platforms such as Google Classroom, Moodle, Skype, and Zoom, and the nation as a whole was experienced with using online learning management systems to communicate with parents about their children’s academics. These platforms are used to post student assignments and grades and serve as a mechanism for teachers to provide feedback on students’ work. Even during the lockdown, grading and testing continued.

Further, the Finnish National Agency for Education has made a sizable investment in online learning. The agency has compiled an online repository full of materials that students and educators can access. Likewise, the agency helped sponsor the creation of Finna, a platform that enables students access to digitized materials from Finnish museums and archives for free.<sup>24</sup> The success of online learning in Finland is encouraging given that some municipalities have already returned to remote instruction.

Two school districts in southern Finland, in the cities of Porvoo and Sipoo, transitioned back to remote learning only two days after reopening following the infection of 17 children and four teachers.<sup>25</sup> Those school districts offered a hybrid approach for the remainder of the school year, as grades 1–3 remained in the classroom and grades 4–6 returned home. Little information has been provided detailing how stringently these districts operated with health and safety protocols.

Some Finnish parents expressed high degrees of concern over the nation's decision to make physical attendance compulsory and doubted schools' abilities to enforce new rules among children. Moreover, many teachers pointed out the discrepancy between available space and the amount of space needed to comply with rules and recommendations.<sup>26</sup>

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These reservations did, however, come in the face of additional assurances from federal officials, including the comments from both leading epidemiologist and Director of the Finnish Institute for Health and Welfare, Mika Salminen, and Education Minister, Li Andersson, who argued that children's return to school is both socially necessary and poses little threat to adults.<sup>27</sup> Most

explicitly, Salminen stated that "the risk of a child infecting an adult is not realistic. Opening schools is risk-free."<sup>28</sup> This statement has been refuted by many, including in an op-ed published in the Helsinki Times that cites a number of scientific developments suggesting the opposite and ultimately argues that "we need much more [evidence] to have definitive answers" on the subject. With 40 percent of Finish secondary school teachers and 31 percent of primary school teachers over fifty and therefore more at risk for coronavirus complications, tensions between teachers and federal officials were high.<sup>29</sup>

While Finland's move to reopen schools and suspend remote learning was met with some opposition, the nation's robust learning capabilities allowed for smooth transitions from in-person to hybrid modes of instruction.<sup>30</sup> Public officials have recognized the possibility of integrating remote learning this fall. Finnish Parliament recently passed a law that allowed for "traditional schooling [to] be alternated with remote learning under certain circumstances," including provisions that "the decision on switching to distance learning be made for one month at a time, and on a local basis."<sup>31</sup>

While Finland's infection rate and total fatalities from the COVID-19 pandemic represent only a fraction of America's,<sup>32</sup> the Scandinavian nation's test run in May could serve as a model for reopening policy in the fall. Finland has yet to announce official plans for the upcoming school year, but many expect policies similar to those implemented in May to be adopted.

## Denmark

On March 13th, Denmark shuttered its economy, ordering non-essential public workers to work from home for two weeks and encouraging private sector workers to do the same.<sup>33</sup> Yet, just a month later, with case counts in the country on the decline, Denmark became the first European country to send its primary school students and kindergarteners back to the classroom.<sup>34</sup> Denmark's total primary and secondary student enrollment is 1,006,603, according to 2017 data.<sup>35</sup> The country faces about an average infection rate among European nations, due in large part to their early action in shutting down many parts of the economy and closing schools.<sup>36</sup>

With primary school students returning to class as many other nations remained in lockdown, the Danish government set forth specific rules of conduct including the near universal implementation of physical distancing and closure of playgrounds. Similar to the approach in Finland, schools allowed for different arrival times based on grade and class to reduce the amount of contact between students. Many schools also included measures that ensured no crossover between individual classes. That is, groups of students "arrive at a separate time, eat their lunch separately, stay in their own zones in the playground and are taught by one teacher."<sup>37</sup>

Other reports detail additional efforts such as reducing class sizes, teaching outside whenever possible, and implementing a "rigorous hand-sanitizing regime."<sup>38</sup> Further, some elective teachers were reassigned as homeroom teachers so class sizes could be smaller and so students would only interact with the members of their assigned "enclave." These elective teachers, who typically teach only a single subject, have been working in conjunction with other teachers to prepare lessons beyond the scope of their usual discipline. This protocol has proven necessary as many Danish schools have only allotted 10 students per teacher to allow for six feet of distance between students. As in Finland, students and teachers are not required to wear masks.<sup>39</sup>

Though Denmark faced criticisms similar to Finland—such as that sending students back into the classroom was premature—officials have stood by their decision. Peter Andersen, a leading Danish epidemiologist, suggested that reopening schools did not result in an increase in cases, stating "you cannot see any negative effects from the reopening of schools."<sup>40</sup> Dorte Lange, vice president of Denmark's teachers' union, largely agrees, stating that the teachers trust the medical authorities advocating for a return to the classroom.<sup>41</sup>

Denmark has been relatively quiet with respect to the future of remote learning in their country, seemingly indicating that a return to in-person instruction is of paramount importance.

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Denmark's early success with primary school students could provide an example for the U.S., most notably in the maintenance of small, independent classes and limited opportunities for incidental violations of social distancing and hand-washing.

### South Korea

South Korea was one of the first nations to confront the coronavirus pandemic, documenting its first case on January 20. Since then, the country has adopted a rigorous program of contact tracing and testing, including drive-through testing sites that was ultimately replicated in the United States.<sup>42</sup>

South Korea educates 5,753,852 primary and secondary school students.<sup>43</sup> Their teachers skew younger than those in the United States, with 30 percent of secondary educators over 50 but only 14 percent of primary school teachers in this age bracket (in comparison, 31 percent of secondary school teachers and 29 percent of U.S. primary school teachers are over 50).<sup>44</sup> After delaying the start of the spring semester by five weeks, South Korea began the semester remotely.<sup>45</sup> First and second graders were taught via lessons on the Educational Broadcast System's TV channel. EBS

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also developed dedicated learning management systems for public schools where teachers could upload worksheets and grade student assignments. In addition, teachers engaged with students using online platforms such as Zoom and Google Classroom.<sup>46</sup> To help teachers create successful virtual lessons and adjust to new teaching mediums, South Korea's Ministry of Education created an official, government-run Preparation and Monitoring team.<sup>47</sup>

After 11 weeks of quarantine and approximately five weeks of remote learning, on May 20th, some schools allowed high school seniors to return to classes with strict social distancing guidelines and cleaning practices in place.<sup>48</sup> Touchless thermal temperature monitoring, repeated in-person temperature checks, and construction of plastic partitions in the cafeteria are among some social and physical distancing tools used to reopen schools safely. Other grade levels planned to return in a phased approach in order of seniority, whereby all students would return to school by June 8th. However, a spike in cases at the end of May due to an outbreak in night clubs resulted in over 500 schools deciding to postpone their reopening or return to only allowing high school seniors.<sup>49</sup>

### Japan

By early June, many Japanese schools, which serve 13,624,844 primary and secondary students, had reopened with strict guidelines in place.<sup>50</sup> Before arriving at school, all students

are required to have their temperature checked by their parents. Results are then logged into a report that is reviewed by the student's teacher. During the school day, all members of the community wear masks and repeatedly wash their hands. Social distancing guidelines are strictly enforced, as exhibited during lunch time when students have to eat in silence at their individual desks. To limit density, students come to school on alternate days. This method of dividing up the community allows for a more controlled atmosphere.<sup>51</sup>

Some younger students have expressed negative feelings about the precautions taken according to interviews conducted by The Washington Post.<sup>52</sup> Elementary school students have said they struggle with eating in silence and abiding by social distancing measures that prohibit them from conversing with their friends. Other students are happy, however, with simply being allowed back in school and are thankful for the opportunity.

As of July 13th, Japan has reported around 22,000 cases and just under 1,000 deaths, although the country has been criticized for refusing to test and treat people who are not in life-threatening situations.<sup>53</sup> These low numbers give the Japanese government more freedom to strive for in-person classes at school, and at a meeting with the Budget Committee of the House of Councilors, Prime Minister Shinzo Abe expressed hesitation about another nationwide shutdown.<sup>54</sup> He said he may request certain areas to shut down their systems but will not likely do so nationwide.

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### Florida

Although not an international example and not a state that reopened its schools this spring, Florida has experience delivering virtual education from which Massachusetts should learn. As current guidelines for reopening schools in Massachusetts allow for the possibility of transitioning to a hybrid of in-person and remote learning, as well as learning entirely remotely, understanding how another state successfully deployed online learning offers instructive lessons for the Bay State's DESE.

Florida's Board of Education ordered schools to close for two weeks on March 13th when the state had 51 cases of COVID-19 (for comparison, Massachusetts did not close schools until March 15 when it had 164 cases).<sup>55</sup> After the Board of Education closed schools, many of Florida's 2,903,500 primary and secondary school students swiftly switched to online learning, even though schools were granted a grace period until March 30 to start online lessons.<sup>56</sup> Coral Spring Charter School in Broward County, for example, began online lessons for grades 6-12 on Monday, March 16, meaning students had no break between shutdown and the beginning of online learning.<sup>57</sup> In Miami-Dade county, staff distributed 45,000 free laptops over four days, collaborated

with Comcast to provide families in need with free internet, and set up a call center for students and their families to receive help logging onto their virtual classrooms.<sup>58</sup> All districts in the state successfully implemented their online learning plans by March 30 at the latest, and an *Education Reform Now* analysis ranked Florida in the top cohort of states for shifting to online learning.<sup>59</sup>

Part of Florida's swift and successful transition to online learning can be attributed to the state's connection with Florida Virtual School (FLVS).<sup>60</sup> FLVS, founded in 1997, became the first statewide internet-based public high school in the United States. Serving students in grades K–12, FLVS “provides a variety of custom solutions for schools and districts to meet student needs” and partners with the Florida Department of Education to train teachers in how to teach

online.<sup>61</sup> Teachers were eligible to take a six-hour course to learn the basic principles of delivering online instruction, which, upon completion, fully certified them to teach at their county's existing Florida Virtual School franchise, giving teachers added flexibility and an expanded skill set. In addition, FLVS provided

100 free online courses per day to any Florida student. These courses were offered through Learning Management Systems, online platforms enabling teachers to connect with students and parents, such as Blackboard and Canvas, that many Florida school districts already have.<sup>62</sup>

The transition to online learning here in Massachusetts was far more difficult. As documented in previous Pioneer policy briefs, the Commonwealth has not invested enough resources into developing robust online K–12 education programs.<sup>63</sup> Early obstacles to virtual schooling here in the Bay State, such as the 2010 provision that limited virtual schools to only drawing students from their own districts, have never been fully resolved.<sup>64</sup> As Michael Horn, an expert in education innovation, articulated in an April 17 episode of the Learning Curve podcast, Massachusetts remains far too “tethered” to traditional brick-and-mortar school models.<sup>65</sup> Repeated failures to develop a more robust online portfolio combined with delayed guidance from the DESE on how to teach this past spring almost certainly hindered the state's ability to transition to online learning in a swift and successful manner.

## Recommendations

Experiences among other states and countries in the wake of the COVID-19 pandemic suggest that both physical alterations and an integration of online learning are necessary to ensure the safety of students and continuity of academic achievement. The scope of the following recommendations does not assess the scientific literature, but rather points to

school reopening strategies Massachusetts ought to consider. As previously alluded to, the Commonwealth remains almost exclusively concerned with traditional models of brick-and-mortar learning. Reopening efforts reflect the same prioritization, even though hybrid and remote learning scenarios require online modalities. Information flowing from European and Asian leaders in primary and secondary education, as well as fellow states that have been leaders in online education, suggest that Massachusetts should take the following additional actions:

- **Massachusetts should prioritize dramatically improving remote learning capabilities.** The sudden shift to online learning in March appears to have caught many Massachusetts school districts off guard, given the weeks-long delay it took for the state to even offer recommendations on how to teach online. After a few months of virtual learning, however, educators, parents, and students are almost certainly more familiar with various software systems like Zoom and Google Classroom than they were a few months ago. However, the Commonwealth cannot be satisfied with the state of learning implemented in the spring. Districts should actively research and explore remote learning solutions over the summer, especially given that the hybrid and entirely remote learning scenarios outlined in the state guidelines require online modalities. The state's guidelines set aside \$25 million for “remote learning technology grants.”<sup>66</sup> These funds should be used to provide basic technological resources such as laptops and WiFi hotspots. They could also be used to help districts acquire Learning Management Systems and even to invest in training teachers in remote instruction methods, similar to the Florida Virtual School certification process. Integration of remote learning is an essential part of reopening strategy here in the Commonwealth, even if it is not the preferable mode of teaching. Further, one can imagine remote learning becoming an integral strategy for learning in Massachusetts even post-COVID-19—for example, on snow days. Supporting districts and teachers in exploring and perfecting the art of virtual teaching must be a priority here, just as it was in Finland, South Korea, and Florida.
- **Massachusetts should include specific criteria by which schools should approach in-person, remote, or hybrid instruction models.** The most recent state guidance requires school districts to prepare for all three models of learning—entirely in-person, exclusively online, or a hybrid approach. Requiring districts to produce detailed plans for all possible scenarios is undoubtedly necessary. The Commonwealth does not include, however, criteria

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**All districts in Florida successfully implemented their online learning plans by March 30 at the latest.**

by which school districts should switch from one mode of instruction to another. Although the U.S. need not adopt the same criteria as Taiwan, for example, which required a shutdown of all in-person instruction in the case of two positive tests in one school, Massachusetts must include some rules or guidelines regarding transitioning between models.<sup>67</sup> Leaving such decision-making solely to school districts may yield inadequate responses to potential outbreaks. However, these criteria should also account for differences with respect to school population, grade levels, remote learning capacity, availability of parents, and a variety of other factors.

- **Massachusetts should refine its guidance related to cohort learning.** The fall reopening guidance from the Massachusetts DESE encourages grouping students into cohorts of varying sizes to minimize the number of students potentially exposed to COVID-19 if a cluster emerges. Cohorts will additionally be used for hybrid-learning models to divide the community should a situation arise where full capacity on campuses is not feasible. Cohort learning was used successfully in Denmark, Finland, and Japan when those countries reopened their schools. Finland's imposition of staggered arrival times for each cohort proved successful at reducing inter-cohort contact, a measure that should be considered in Massachusetts. Denmark also reassigned elective teachers to teach primary subjects so they could have their own cohort of students – a proposal Massachusetts guidance likewise suggests. These cohorts help make efforts to contact trace and monitor outbreaks of the virus easier. What needs refining, however, is the state's guidance on cohort learning in middle and high schools where students typically move around more frequently and interact with multiple peers and teachers.
- **Massachusetts and local school districts should investigate supplementary methods of communication with students, families, and teachers.** Massachusetts recommends that districts “develop a family survey” to make administrators better able to determine which learning model best fits their students' needs, which students have resources for online learning, and a host of other questions. The Commonwealth does not, however, offer robust guidance on what to do with this information. Given the state's prioritization of in-person instruction, questions of remote learning capabilities, including parental availability for student supervision in the event of transitioning to a hybrid learning model, may be overlooked. Collecting data on the makeup and attitudes of a particular district's population is undoubtedly helpful. The state should use these data to offer contingency plans that account for questions of accessibility, such that high-risk and low-income students and families

Funds should be used to provide basic technological resources such as laptops and WiFi hotspots.

are not disadvantaged by an adjustment to remote learning. This supplementary data should also inform development of the criteria for switching between modes. Further, Massachusetts and local school districts should actively communicate with teachers to address their concerns about reopening and how to better conduct online learning when necessary. According to 2017 data from the Organization for Economic Cooperation and Development, 29 percent of primary teachers and 31 percent of secondary teachers in the United States are over 50, which potentially makes them more at-risk for teaching in-person. Many teachers are understandably concerned about returning to the classroom, and teachers in other countries such as Finland shared these fears. School districts cannot afford to ignore teachers' concerns. Instead, they must actively survey them. Strong communication with students, parents, teachers, and staff is crucial.

- **Massachusetts and local school districts should be willing to adjust physical distancing guidelines and be flexible in using a variety of public spaces for schooling.** Social distancing is a necessary requirement for mitigating the spread of COVID-19. However, scientific consensus is still emerging regarding what distancing measures are most appropriate. The current DESE guidelines recommend that students and staff keep, at minimum, three feet of distance from others, with all students and staff older than second grade wearing masks. The three feet standard is consistent with the World Health Organization's social distancing guidelines, although the CDC recommends maintaining a physical distance of at least six feet.<sup>68</sup> In contrast, students are separated by “at least two meters (6.5 feet)” in Denmark.<sup>69</sup> In Finland, on the other hand, no strict distancing measurement has been offered, but guidance instead suggests that “spaces can be arranged more spaciouly.”<sup>70</sup> These guidelines are significant not only for protecting students and staff, but also because they dictate how many students can be in the classroom. While Denmark set a cap of 10 students per classroom, the current three feet minimum guideline in Massachusetts will enable significantly more students to return to the classroom. If schools adopt the six feet guideline, they will just have to be more creative in using existing and potentially additional facilities as classrooms. In Denmark, some fourth and fifth graders learned in the national soccer stadium to create more space between students and reduce crowding in other schools.<sup>71</sup> While the weather remains nice, Massachusetts should investigate the ability to hold classes outside, where ventilation is better and risk of infection is lower. Schools should also investigate whether YMCAs, public libraries, or other community centers would be willing to lend spaces

to schools that need them. Otherwise, districts will have to make remote learning more prominent, as the Lexington Public Schools have recently decided to do.<sup>72</sup> Finally, for situations where physical distancing is more challenging, schools can investigate employing other measures, such as placing plastic partitions between students, like the ones South Korea used in school cafeterias.<sup>73</sup>

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## About Pioneer

Pioneer Institute is an independent, non-partisan, privately funded research organization that seeks to improve the quality of life in Massachusetts through civic discourse and intellectually rigorous, data-driven public policy solutions based on free market principles, individual liberty and responsibility, and the ideal of effective, limited and accountable government.



