

Teaching Future Educators During a Global Pandemic

Jacquelynnne Anne Boivin
Bridgewater State University
USA

Kathryn Welby
Merrimack College
USA

Abstract

While schools are the center of attention in many regards throughout the COVID-19 pandemic, programs that prepare educators have not received nearly as much attention. How has the reliance on technology, shifts in daily norms with health precautions, and other pandemic-related changes affected how colleges and universities are preparing teachers for their careers? This article walks the reader through the pandemic, from spring 2020, when the virus first shut down the US in most ways, to the winter of 2021. The authors, two educator preparation faculty members from both public and private higher education institutions in Massachusetts, reflect on their experiences navigating the challenges and enriching insights the pandemic brought to their work. Considerations for future implications for the field of teacher-preparation are delineated to think about the long-term effects this pandemic could have on higher education and K-12 education.

Keywords: COVID-19, hybrid, licensure, remote, teacher-preparation, virtual

Many overlook the impact the school closures and pandemic have on teacher-preparation programs, who rely on their PK-12 (pre-school through twelfth grade) partners to provide and prepare teacher candidates for a career in education. Teacher candidates are students on track to earn a teaching license. With the constant influx within the public schools, teacher-preparation programs must be ready to adjust and instantly change. Teacher-preparation programs are higher education programs that lead to college students graduating with a public school teaching license. This paper conveys a perspective narrative from two teacher-preparation faculty members in different higher education institutions in Massachusetts – a public institution with approximately 1,500 teacher candidates and a private institution with almost 650 teacher candidates. In combination, the institutions are preparing nearly 2,000 of Massachusetts future educators during a pandemic. This article is divided into four main sections that present a timeline of considerations: springtime crisis in full bloom; summer of planning or summer of wondering?; fall semester's trials and tribulations; and future implications.

Springtime Crisis in Full Bloom

In mid-March of 2020, the United States was thrown into a state of panic and chaos. As a result of the COVID-19 global pandemic, millions of students across the United States experienced a dramatic switch in how their education was delivered, in-school delivery to home-based learning. As the coronavirus began spreading across the United States, education changed abruptly. Schools at every level in Massachusetts, ranging from pre-school to higher education, were forced to pivot their educational plans for Spring 2020 drastically. Suddenly, all Massachusetts schools were mandated to go online for the remainder of the school year.

State and private institutions were forced to respond similarly. Living and learning on campus was not an option. Students across the state were sent home to learn remotely for the remainder of the academic year. There was a sense of solidarity in the educational community and staying at home was the safest decision. While some argue that online education quality does not match the rigor and sociability of in-person learning, others say that remote education is the only way to ensure peoples' safety. Either way, as a higher education community, both state and private institutions had to adjust to the ever-changing educational landscape. An added challenge was the lack of in-person practicums (hours logged in assistive/observational roles in classrooms), field-based experiences, and other clinical requirements critical in teacher-preparation programs. Specifically, the delivery of the rigorous Massachusetts licensure expectations of teacher-preparation programs, while learning each of the district's PK-12 distance learning models, had proven to be challenging for all the stakeholders involved. Such stakeholders include students, school districts, and college faculty.

Teacher-Preparations' Response

Teacher-preparation had no choice but to adjust and respond to the changing educational landscape. Change can invoke a response, but there were too many stakeholders to have a wait and see approach. While decisions were pondered, both students and faculty were fearful of the unknown changes that would need to occur, adding stress and anxiety to an already stressful landscape.

Student Response

Working with future teachers at the college-level online during a pandemic lacked any sense of normalcy. It was not uncommon to have students who are parents, working part-time, and juggling their roles as employees, students, and caregivers within the confines of their full

houses with everyone at home. Other students had to respond to family unemployment. Specifically, some students whose parents lost their jobs due to the pandemic were working extra hours at the local grocery store to make ends meet, while others had to take leaves to work full-time jobs to supplement families' income. To provide for their families, students were exposing themselves to the public in the hopes of having a meal on the table daily. Not only having to cope with the added responsibility of providing for their families, these students were also missing their placements and the continued development of relationships with their students.

Other students had to take on the role of teachers and guardians to younger siblings as their parents went to work. Students with parents working essential jobs had to assist their siblings with remote learning, impacting their ability to complete course work and licensure requirements. In sum, not only were they scared and worried about their health and their families' health, but students were also concerned about how the pandemic would affect their grades and track toward licensure. In combination, all the stresses were adding up, and they were simply in a state of prolonged anxiety and distress.

Faculty Response

Students were not the only group with anxiety and added stress. Having to pivot from in-person classes to online classes half-way through the semester, teacher-preparation faculty had to deal with a myriad of options and not a lot of time to figure out the best avenue. Zoom, Google Classroom, or Microsoft Teams? Synchronous or asynchronous? Between quickly learning new applications and trying to post everything on the college's learning platform, like Blackboard or Canvas, faculty soon learned that academics were not the only concern they had to handle. Students were expressing their emotional distress and needed help. The faculty needed to provide comfort and assurance in a time filled with doubt and concern while also trying to teach, care for their families, and teach their children remotely with the school closures. Everyone made it through the last few weeks of the semester, happily welcoming the warm summer months with hopes of a normal fall semester. There were still so many unknowns, but students and faculty welcomed the break.

Summer of Planning or Summer of Wondering?

The summertime brought educational professionals a chance to regain composure and plan for what laid ahead. It was clear that there was significant room for improvement regarding teaching remotely. Teachers across the US, at every level, were participating in professional development webinars and spending time meticulously improving their ability to teach as effectively as possible in an online platform. As the summer progressed, it was clear that a vaccine would not be ready, and there was discussion of another fall surge; Therefore, the efforts moving forward largely were with the mindset that schools would be remote without a vaccine in place. As businesses reopened and there was a slight increase in the normalcy in people's lives, talk of in-person schooling was on the rise. Decreased positive tests for the virus provided some with the hope that we were on the other side of the pandemic and that being inside classrooms has potential.

Summertime decreased the uniformity of educational decision-making. With the virus still present in Massachusetts, educators wondered if all schools would be remote or would schools be held in person. By mid-summer there was discussion that public elementary and secondary schools were mostly opting to try in-person and hybrid approaches in the fall to avoid a completely online avenue. This situation evoked large teacher protests and parental concerns

for child safety. Since there were so many flaws in remote teaching in the Spring, schools wanted to avoid remote education as long as they could. But at what cost?

Higher education was met with this same issue, coupled with added financial pressures. Many of the state's public institutions' decisions were to have classes remotely. Different funding sources and levels of financial pain were the leading factors in deciding if an institution could be online in the fall.

Some private institutions, afraid of closures, opted to open and provide students with a choice to go in person or fully remote. For many institutions, fully opening, including allowing students to attend and live on campus room was an expensive option, but their only choice to avoid possible bankruptcy or closure. With the decision to open, funding had to be dispersed to prioritize testing, tracing, isolation protocols, and adding campus-wide personal protective equipment (PPE), which may have come from other sources leading to layoffs, furloughs, and salary cuts.

Teacher-Preparation's Planning

A typical summer for faculty in a teacher-preparation program is filled with professional development, teaching summer classes, and pursuing scholarly endeavors through writing and research. This summer, in particular, was different. There was an enormous cloud of doubt that hung over the heads of faculty. This cloud of doubt was filled with questions and wonderings like, "What is my institution going to choose for fall? Could we pivot half-way through? Will my students get experience in actual classrooms? How will the state respond to ensure students can still take their licensing exams and log their required hours? Are my partner districts remote, hybrid, or in-person? Could that change? Do we now need to be teaching students best practices for teaching remotely as a professional expectation?" These questions made it challenging for faculty to plan and prepare thoroughly since we did not know what the fall would actually bring. A remote semester gave the promise of confidence in how the semester would run, but an in-person or hybrid model still left faculty with a sense of insecurity. What if the pandemic took a turn for the worst? Having to plan for one model yet plan for a possible pivot to completely remote caused some faculty to prepare twice as much.

Additionally, every Tuesday throughout the summer and beyond, teacher-preparation program leaders from public and private higher education institutions throughout Massachusetts would meet with the Department of Elementary and Secondary Education to discuss fall expectations. The meetings were insightful and built a sense of community between all the Massachusetts teacher-preparation programs, but most of the time, decisions were continually changing. With no one to blame, these meetings were difficult because of all the unknowns such as the spread of the virus, no PreK-12 decisions, teacher union strikes and demands, and the situation's complete uncertainty. Planning for fall practicum (student teaching in the field, where the future teachers is able to take full teaching responsibility by the end of the experience) and field-based experiences were even more difficult with the unknowns within the PreK-12 schools.

The Massachusetts Teacher Union was in disagreement with the Massachusetts Department of Elementary and Secondary Education's decision to reopen the schools with concerns of staff and student safety (MTA, 2020). Until a compromise was made between the state and the public schools, teacher-preparation programs were in limbo and had difficulty making decisions. The only option was to plan for multiple different situations and wait for decisions

to be made in PK-12. Most decisions were unknown until mid-August, around the same time our students returned to campus.

As the college students began to return to campus with no concrete decisions on the PK-12 public schools' operational plan, the real scramble began to successfully prepare our future educators amidst the unknown and ever-changing public school landscape. As challenging as it was to plan and implement simultaneously, most higher education institutions demonstrated flexibility and adjusted as needed, leading to a fall semester like no other, simultaneously planning, implementing, and adjusting.

Fall Semester's Trials and Tribulations

The decision on what to do this fall was not taken lightly by either institution. Leaders had to take everything into account from the safety of their staff, faculty, and students through the operations and budget of personal protective equipment, ever-changing enrollment numbers, and a variety of instructional modalities to ponder. To make such extreme, college-wide changes within weeks was a daunting task. Both institutions opted for a different approach. The public institution adopted a mainly remote option (with on-campus housing options and in-person classes for lab sciences and performing arts), while the private institution adopted an in-person, on-campus experience. The fall semester has been a time of reflection, anxiety, change, and creativity.

At the beginning, the public institution was mainly remote, with some classes occurring in a hybrid format on campus. This mostly pertained to classes that benefited from in-person instruction, like lab-sciences and performing arts. In the elementary and early childhood education department, all classes were remote, with the exception of student teaching during the second semester of senior year. Those students were participating in whatever format their school district decided, although most had at least part of their week with students in-person.

In the private institution, approximately 90% of the education classes were taught in person and on campus, with the hopes of creating a sense of normalcy in the community and keep students engaged in the curriculum. Students were able to live on campus and experienced a modified yet enjoyable college experience. Specifically, outside dining increased with food trucks, outdoor wood fire ovens, and pizzerias throughout the campus grounds, in addition to the typical college cafeteria options. Outdoor social opportunities increased with the purchase of hundreds of Adirondack chairs and fire pits placed throughout the campus grounds for relaxation and socializing. Tables with umbrellas were added in open areas to eat and work on and open-air tents and patios with heaters popped up throughout the campus. Students adopted a different, yet memorable, college experience.

Additionally, the institution was rigorous on protocols and expectations. Faculty members were expected to undergo COVID testing once a week, while many students had to have COVID testing bi-weekly. All testing was conducted on campus. Basketball courts were transformed into COVID testing clinics, and medical labs were present on campus. The campus entrances were guarded with strict entrance protocols along with phone application clearance to enter. Within the campus, strict social distancing guidelines and testing, isolation, and quarantines kept the fall semester running smoothly. In combination with alternative socialization methods and strict COVID protocols, campus residence and academics were active and well-functioning.

Although both institutions opted for different fall instruction models, both schools are large teacher-preparation institutions and had to plan a course of action to prepare a combination of around 2,000 future Massachusetts educators to be immediately impactful in the field once they graduate. Regardless of the model the leaders of the institution decided, both schools had to consider how to successfully provide teacher-preparation education, pre-practicum, and practicum experiences with minimal access to in-person experiences within the neighboring public PK-12 school districts.

Life Without a True Pre-Practicum

Traditionally, students have field experiences working with students in schools before their student teaching experience called the “pre-practicum.” According to the Massachusetts Regulations for Licensure and Educator Preparation Program Approval, the pre-practicum is defined “as the field-based experiences with diverse student learners that take place during the early part of a candidate’s preparation” (603 CMR 7.02). Pre-practicum includes all field-based experiences integrated into courses or seminars that address the Massachusetts Professional Standards for Teachers (PST) and the Massachusetts Subject Matter Knowledge (SMK) requirements. Although having limited access to the public schools, the expectations of a pre-practicum experience did not waiver. However, the Massachusetts Department of Elementary and Secondary Education did allow some modifications of the traditional pre-practicum experience.

For example, in a math methods course in the public institution, the students usually get an entire day at their field placement to practice teaching lessons and supporting students. This serves as the pre-practicum fieldwork hours for multiple subject-specific methods courses. During the fall semester, however, this was not feasible. Partnering school districts could not host the students due to the various needs of adjusting to the myriad of safety protocols. Students expressed, throughout the semester, that they were yearning for opportunities to work with students. Rather than teaching lessons to a classroom full of students, they taught their lessons to peers over Zoom. By also utilizing online tools like *Mursion*, for simulated teaching experience with partial-artificial intelligence avatar students, some behavior management skills were able to develop in these student teachers. In sum, the students whose experiences are typically greatly reliant on fieldwork was a struggle to facilitate, but they did the best they could with what they were given.

Video-recordings of classroom teaching were also a valuable resource, due to the lack of time spent in actual classrooms. Grissom (2020) advocates for using a variety of teaching videos with structured forms for future teachers to fill out when observing such content. Such observational guides promote high-quality reflective practice, which is an evaluation element in the state of Massachusetts. An emphasis on reflective observation has promise as serving as highly conducive addition to an experiential learning plan (Grissom, 2020). Such an approach aligns with what was happening in the math methods course at the public institution, as students had structured observation protocols and discussion prompt questions. Reflective discussions after videos occurred between students and also between the instructor and the students. Grissom (2020) affirms that such a mixture is recommended.

The same was true in the private institution. Two out of the three typical in person pre-practicum experiences were not feasible, and access was limited in the surrounding school districts with fear that college students may be spreaders of COVID in their communities. Instead, over 15 hours of observational videos were compiled for students to watch and reflect on the teaching they saw while adhering to strict guidelines of the Massachusetts Department

of Elementary and Secondary Education. The third pre-practicum was an experience at the school the students were planning on completing their practicum at. Students were expected to attend if the school day was in person or hybrid. The districts had less of a problem with attendance in the third practicum because the teacher candidates would be part of their school for the entire year.

Both institutions were able to pivot and re-create pre-practicum opportunities for students to learn with limited public school access. What did the practicum experience look like during the global pandemic?

Practicum: Areas Emphasized and Areas Lacking

After teacher candidates complete their pre-practicum requirement, traditionally, students will be placed in practicum. A practicum usually takes place during the second semester of senior year, right before graduation. According to the Massachusetts Regulations for Licensure and Educator Preparation Program Approval (2020) a practicum is “a field-based experience within an approved program in the role and at the level of the license sought, during which a candidate’s performance is supervised jointly by the sponsoring organization and the supervising practitioner and evaluated in a Performance Assessment for Initial License” (603 CMR 7.04). With all of the changes, how will the pandemic impact the practicum experience of the student teachers?

After supervising student teachers in the public institution, it was evident that the student teachers and cooperating teachers (classroom teachers hosting student teachers) felt that the practicum experience emphasized specific skills to the extreme, while other experiences were lacking. For example, the need to establish clear classroom routines was more heavily stressed than ever before, not just for the sake of routine and having a productive learning environment, but for health and safety. There were concerns that elementary students lack the deep relationship-building that comes with spending five days per week with their teacher. If a kindergarten teacher who has been implementing a hybrid model only saw half her class at a time, for half the day, they may feel as though they have half as strong a relationship with students in the first few months as they would have had in a typical school year. They may lack a thorough understanding of the students’ strengths, weaknesses, and learning styles and worry that the student teacher is missing out on the ability to practice observing these skills as routinely as they should occur.

Trust and Whalen (2020) conducted a study in which they surveyed educators to gain insight regarding their experiences in teaching during the Spring of 2020. It was clear, based on survey results, that most classroom teachers (kindergarten through twelfth grade) were learning how to teach using technology and in online capacities for the first time. They refer to this as “building the plane while flying it” (p. 193). After a summer of preparation and training in technology, teachers were better equipped for remote and hybrid teaching in the fall. Trust and Whalen (2020) advocate for preparation programs to use this as an opportunity to better equip future teachers with technological skills and networking. In all, the longer that educator preparation programs are training teachers to be responsive to the pandemic, the more conducive their practicum experience will be. Such training should include opportunities for student teachers to become familiar with video-conferencing platform features to be more fluid in their teaching so as to be more focused on the content being taught, rather than stumbling through technological logistics (Maher, 2020).

With the fall 2020 semester done and plans for spring 2021 commence, discussions regarding fall 2021 are already beginning. Will we be remote? Will there be a vaccine distributed to everyone? The questions continue to accumulate, yet answers are yet to be found as only time will tell.

Where We Go from Here?

While this global pandemic has meant a time of prolonged, heightened anxiety for people of all ages, there have been some silver-linings to the experience for teacher-preparation programs. These include increased respect for the teaching profession, increased flexibility for student teaching supervision assignments, more productive days for scheduling meetings, and more streamlined technology incorporations.

In March of 2020, the teaching profession came into the spotlight as one of immense respect and admiration. Suddenly, teachers were regarded by the public as heroes, and yard signs marking teachers' homes were symbols of pride and adoration. Teachers were the equivalent of health-care workers for their ongoing hard work and flexibility. As parents began to support their children's education at home when learning remotely, it became increasingly clear that what teachers do every day is not easy. This pandemic has reignited a pride in teacher candidates' career paths.

Teacher-preparation programs are just one example of a field working primarily remotely since the pandemic began. The public institution has been mostly remote since March 2020. While supervising student teachers typically means having to physically go into schools to observe teacher candidates numerous times throughout the semester, the observations still occur, but via video. Student teachers can video-record their observations and upload them to a secure server for the program supervisor to evaluate and provide feedback. There are some evident benefits to this model. The first is that the program supervisor can be assigned student teachers in numerous locations since the travel-time is not a factor. Also, since the lessons are recorded, the program supervisor does not distract students in the classroom when coming in to observe. Another benefit of video-recording the lessons is that the program supervisor is able to pause the video and take notes and then resume when ready. This allows for a more thorough write-up to supply the state documentation system when recommending the student teacher's endorsement toward licensure.

It is no surprise that days feel more productive in a remote setting in some ways. Rather than having to walk across campus to various meetings, it's easier to have meetings back-to-back. This makes faculty more available to meet with more students as needed to provide them with more one-on-one support. Some faculty have shared that more students show up during remote office hours than when office hours were held in-person. This is attributed to students not having to travel to the office for a meeting, and if it's just for a quick check-in or question, they feel it is easier to meet in this capacity. Having meetings online also provides more opportunities to attend workshops/webinars/conferences to continue professional development.

By teaching online, faculty have increased their comfort and fluidity with video-conferencing platforms, learning management systems, and other online resources. Some of the approaches that are tried in the remote classroom will carry over to in-person learning in later semesters. For example, using more document-sharing for in-class activities, rather than writing on chart paper in small groups allows students to refer back to in-class activities and review other groups' work more routinely at their ease after class.

The private school experience was similar. Faculty members learned how to conduct paperless lectures and create classroom experiences using various free virtual resources and applications. Students are more available and willing to meet independently. Rather than trying to align schedules for in person meetings, students would show up to remote office hours and seemed more engaged and open to extra support sessions. Rather than having to walk across campus for extra support offerings and office hours, they would show up virtually. Office hours of the future, most likely, will continue with a virtual component. Additionally, faculty and staff meetings are often more targeted and direct when conducted remotely than in person. The agenda is followed, decisions are made, and action items are identified.

Another positive impact of the pandemic on teacher-preparation students are the opportunities that students are presented immediately following graduation. Districts need technologically savvy educators. Students have proved to school districts that they have the required technical skills to lead a remote classroom, making teacher-preparation students very desirable candidates for immediate employment. Schools across the state have been reaching out to hire recent graduates or soon to graduate students, even willing to hire emergency licensure candidates who may not have passed the Massachusetts Test for Educator Licensure. Many seniors already have employment opportunities for next year and have committed to schools months before graduation.

Future Implications

The future of teacher-preparation will most likely look different because, as a result of the pandemic, the future of K-12 will most likely be forever altered. Teacher-preparation will be tasked at looking beyond the textbook and beyond the schoolhouse while collecting and learning the innovations that have emerged from remote learning. Teachers are implementing various instructional styles to accommodate and differentiate instruction for all learners while using a multitude of technological resources, breaking out students into working groups through multiple platforms, co-teaching with service providers, and integrating more technology into their everyday teaching. Teacher-preparation programs will be forced to keep up with the innovations and rethink the current course of study by including more innovative practices.

The global pandemic of 2020-2021 has proved that many practices are outdated, and we are experiencing educational history and innovation. The routines and expectations at colleges and universities with educator preparation programs may shift with an emphasis on practicality and convenience. This section now explores possible changes that warrant serious consideration for the future of educator preparation in a post-pandemic world.

Recommendations

After the pandemic ends, classes at the PreK-12 level and higher education would not necessarily have to be canceled due to inclement weather or building malfunctions since online teaching is an established norm (Markos, 2020). This would, as a result, allow for learning to continue in scenarios that previously shut down schools. In addition, without work all obligations being contingent upon being in-person, meetings for faculty at the PreK-12 level and higher education may occur on video-conferencing platforms more frequently, thus being more convenient for those professionals (Fogarty et al., 2020). In addition, meetings with students (in higher education for office hours) and parents (in PreK-12) may occur on video-conferencing platforms more frequently to better accommodate schedules and geographic

availability (Exstrom, 2020). With both students and parents having vast experience with video-conferencing platforms, the ease with which they can connect with educators increases the convenience of such meetings. While remote and hybrid instruction may not continue to be used as frequently in the future, educators may see value in the new instructional approaches they have tried and continue them where they see the more benefit in post-pandemic times. In addition, course content will need to include remote learning strategies to teach children with and without disabilities. This pandemic proved that remote learning would most likely continue for many populations post-COVID (Superville, 2020). Greater emphasis on accommodating in multiple modalities will need to be considered. A final recommendation is for teacher-preparation programs. Practicum supervision for program supervisors may continue being done via video-recorded lessons, rather than the program supervisor visiting the school in-person. This is more convenient for the program supervisor and allows for better feedback due to the ability to pause and take notes. IT also avoids the program supervisor serving as a distraction for students during the observed lesson, making for a more authentic lesson experience for everyone. This is just one way the higher education is facing some long-term changes post-pandemic (Llopis, 2020).

While this pandemic had posed countless challenges and required a level of flexibility and courage that many education professionals have never had to put forth, the experience has made the field of education stronger and has shed light on its resilience. Educator preparation programs are sometimes a forgotten entity to the education community when thinking about how teachers respond to the pandemic. In reality, these programs are the backbone of the profession. Without them, where would schools get their high-quality educators? Educator preparation programs have pivoted in response to the pandemic and while the experiences of future teachers in these programs may have been lack-luster in comparison to what their experiences would have been prior to the pandemic, it is awe-inspiring what these programs have been able to supply when considering the restrictions in place. Moving forward, with an admiration for the accomplishments achieved in these trying times, it's necessary to think about how the challenges have improved what these programs do. The new learning and skills required for faculty and students was not time-sensitive. Being more agile with technology is not just a pandemic-specific skill. It's integral that the field of education does not revert back to past-practice after the pandemic ends. Rather, the field of education needs to think critically about how the experience can make it better for educators and students alike.

References

- Massachusetts Department of Elementary and Secondary Education. (2020). *Educator licensure and preparation program approval regulations*.
<https://www.doe.mass.edu/lawsregs/603cmr7.html?section=02>
- Exstrom, M. (2020, October 6). Will the pandemic change the way we deliver K-12 education? *National Conference of State Legislatures*.
<https://www.ncsl.org/research/education/will-the-pandemic-change-the-way-we-deliver-k-12-education-magazine2020.aspx>
- Fogarty, P., Frantz, S., Hirschfeld, J., Keating, S., Lafont, E., Lufkin, B., Mishael, R., Ponnayolu, V., Savage, M., & Turits, M. (2020). Coronavirus: How the world of work may change forever. *BBC*. <https://www.bbc.com/worklife/article/20201023-coronavirus-how-will-the-pandemic-change-the-way-we-work>
- Grissom, D. (2020). Experiential learning through video observations. In R. E. Ferdig, E. Baumgartner, R. Hartshorne, R. Kaplan-Rakowski & C. Mouza, (Eds), *Teaching, technology, and teacher education during the COVID-19 pandemic: Stories from the field* (pp. 97–112). Association for the Advancement of Computing in Education (AACE). Retrieved February 21, 2021 from <https://www.learntechlib.org/p/216903/>.
- Llopis, G. (2020, October 17). Post pandemic: How must colleges and universities reinvent themselves? *Forbes*. <https://www.forbes.com/sites/glennllopis/2020/10/17/post-pandemic-how-must-colleges-and-universities-reinvent-themselves/?sh=37d4375d3e88>
- Maher, D. (2020). Video conferencing to support online teaching and learning. In R. E. Ferdig, E. Baumgartner, R. Hartshorne, R. Kaplan-Rakowski & C. Mouza (Eds), *Teaching, technology, and teacher education during the COVID-19 pandemic: Stories from the field* (pp. 91–96). Association for the Advancement of Computing in Education (AACE). Retrieved February 21, 2021 from <https://www.learntechlib.org/p/216903/>.
- Markos, M. (2020, December 16). End of snow days? Remote learning becomes new normal for some districts in Mass. *NBC Boston 10*.
<https://www.nbcboston.com/news/local/brookline-schools-to-replace-snow-days-with-remote-days/2258624/>
- Massachusetts Teacher Association. (2020, August 21). *MTA rejects DESE guidance on requiring remote teaching from schools*. <https://massteacher.org/news/2020/08/mta-rejects-dese-guidance>
- Superville, D. (2020, December 15). Remote learning will keep a strong foothold even after the pandemic, survey finds. *Education Week*.
<https://www.edweek.org/leadership/remote-learning-will-keep-a-strong-foothold-even-after-the-pandemic-survey-finds/2020/12>
- Trust, T. & Whalen, J. (2020). Should teachers be trained in emergency remote teaching? Lessons learned from the COVID-19 pandemic. *Journal of Technology and Teacher Education*, 28(2), 189–199.

Corresponding author: Jacquelynne Anne Boivin

Contact email: jboivin@bridgew.edu