



What Really Changed? Environments, Instruction, and 21st Century Tools in Emergency Online English Language Arts Teaching in United States Schools During the First Pandemic Response

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Turchi LB, Bondar NA and Aguilar LL (2020) What Really Changed? Environments, Instruction, and 21st Century Tools in Emergency Online English Language Arts Teaching in United States Schools During the First Pandemic Response. Front. Educ. 5:583963. doi: 10.3389/feduc.2020.583963 In this article, a teacher educator and two veteran teachers of 9–12 English Language Arts (ELA) inquire into the opportunities, challenges, and lessons learned from the abrupt transition to online learning caused by the COVID-19 pandemic. The shared setting was a major metropolitan area. The fundamental question addressed is *What really changed*? In ELA classes that were already rich in digital resources, and where assignments were regularly submitted using internet-based learning management systems, the Spring 2020 school close-down and move to online instruction nevertheless meant profound changes to the authors' teaching lives. In this article they investigate the approximately 12 weeks that concluded the first pandemic semester, focusing on the impact on teaching and learning environments, instructional purposes, and 21st century tools. The authors believe these changes will have consequences in future classrooms, in whatever physical or virtual contexts teachers find themselves delivering instruction.

Keywords: self-study, narrative inquiry, COVID-19, pandemic, online teaching, remote teaching, English Language Arts instruction

INTRODUCTION

As United States schools finished instruction for the spring of 2020, policymakers, teachers, administrators, parents, and students endeavored to understand the impact of the COVID-19 shutdown of in-person teaching and learning, and many contemplated what would happen next. In this article, a teacher educator and two veteran teachers of 9–12 English Language Arts (ELA) report on the opportunities, challenges, and lessons learned from their approximately 12 weeks of emergency online teaching. Their fundamental question is *What really changed?* Together they considered the impact of the new context for teaching and learning on their well-practiced instructional strategies and curriculum decisions; on their purposes for teaching; and how they

used 21st century digital tools. The researchers followed a selfstudy process, drawing on narrative inquiry methodologies, to better understand what felt like profound changes to their teaching lives.

Through articulating their stories and examining their multifaceted narratives together, the authors have identified and explored three complex areas of change:

- *Changed environments*: How do veteran teachers employ their hard-won expertise for creating and managing dynamic places for learning when the schoolhouse is disbanded and home schooling becomes a norm? If the brick-and-mortar building no longer organizes time and relationships, how do routines and rituals change for teachers and students?
- *Newly focused purposes*: When new strictures on time, scheduling, and curriculum alter priorities for student assignments and assessments, must instructional purposes change?
- *Twenty-first century learning at last?* When the pandemic hit, the authors were teaching classes that were already rich in digital resources, and students were regularly submitting assignments online. Nonetheless, when tools that had supplemented their classrooms became the medium for instruction, emergency online schooling gave the authors insights into their practices as ELA instructors.

METHODOLOGY

Thinking as both teachers and researchers, the authors examined their teaching during the approximately 12 weeks of ad hoc teaching made necessary by the COVID-19 pandemic. Through collaboratively interrogating their individual narratives and shaping a rich common one, they sought to understand how and whether they were able to promote sophisticated reading and writing, and independent student performance (key goals for ELA) despite the emergency move to online teaching.

The three teacher-researchers were in collaborative relationships with each other before the pandemic, largely focusing on strategies for teaching Shakespeare plays. Throughout Spring 2020 they had extensive conversations about what was happening beyond that specific curricular focus. They were keenly aware that changes were happening fast, and that administrators and whole systems were improvising to meet the challenges. It was exhausting: only after grades were submitted and the semester ended could they catch their collective breaths and begin to systematically interrogate the changes in their teaching lives, as well as speculate as to whether there would be lasting differences in their professional practices. To formalize a collective research endeavor, the authors agreed to follow narrative research processes in order to articulate their "embodied knowledges" and to create a "stage for narratable selves to make connections" (Andrews et al., 2011, p. 28) in the newly isolated and virtual education world. The three authors agreed to listen and think carefully in order to find expression of their commonalities: it was good, they agreed, not to feel so alone.

In the beginning, despite being established professional friends, the authors were nervous about taking on a research process: sharing personal writing meant learning to collaborate in new ways. The first two authors had previously co-authored one scholarly paper, and this was a first paper for the third author. While the first author had experiences that could generally guide the process, she was determined to find a way that all three voices and perspectives could be represented in their collective narrative. Following Clandinin (2006), she knew that narratives would enable them to create a three-dimensional inquiry space in which they could co-construct what had happened in their teaching lives during this historically strange and difficult time.

As a first step, the three authors brainstormed a list of topics pertaining to school environment and high school ELA instruction. The conversations, carried out using Zoom, were recorded both by individual notetaking and as videos, and were reviewed to capture the evolution of ideas and the emergence of themes (Schaafsma and Vinz, 2011). Because, initially, the authors felt that everything had changed, they worked to catalogue the intertwining personal and professional situations that the pandemic had brought. Common truths that emerged early included their shared commitment to ELA teaching and shared exasperation over the disruption to what were usually well-oiled classroom functions. Because these were broad categories, they worked to break down the topics into categories of "time, person, and place" in order to communicate about the nuances of their individual situations (Hamilton et al., 2008, p. 20). They learned to be comfortable with asking clarifying questions of each other to capture differences as well as similarities, and these conversations became the basis for understanding each other's unique professional landscapes (Craig, 2004).

Following Lyons and LaBoskey (2002), the researchers tested the validity of their claims through telling their virtual school and classroom stories to each other as expert ELA practitioners. This meant working to understand each other's commitments and choices: "Do you mean that they did this?" "Wow: I would have loved for that to have happened in my school" "What is the university thinking?" Such questions allowed them to align their teaching situations in ways that helped to uncover their assumptions and decisions. The authors turned to the rhetorical question of audience and determined that it was helpful to think of their research as "for" the student teachers and new teachers who were experiencing the pandemic and its aftermath without a repertoire of strategies that could be adapted. They hoped their efforts would "prompt reflection and resonance" (Chiu-Ching and Chan, 2009, p. 21) in future colleagues.

After several hours of focused and recorded discussions, the researchers decided they would write detailed individual narratives to articulate their beliefs about the topics they had chosen together, and thereby create a more intentional process for finding commonalities (Lyons and LaBoskey, 2002; Berry, 2009). After writing and then reading each other's narratives, they critiqued and combined those stories to further delineate and provide examples for what they identified as three emerging themes within a story of change: (1) how important the brickand-mortar school was (is) to student relationships, parent relationships, and professional relationships; (2) the instructional designs and purposes that still mattered most to them, even in online teaching; and (3) the 21st century digital tools that had moved from supplementing their teaching to becoming the medium of instruction. These categories became the lenses for further analyses of their experiences.

Thinking as both ELA teachers and social scientists, the three authors employed the power of the mirrors and windows (Bishop, 1990; Woodson, 2014) that their narratives could provide to each other's practices (Connelly and Clandinin, 2006). They found a common language in ELA teaching practices. They analyzed their instructional designs and decisions, especially where they were puzzled about their students' responses to more-or-less familiar assignments. They reviewed Fisher and Frey's (2013) model for instructional design and its framework for how teachers gradually release responsibility for learning to students. Drawing on both Fisher and Frey (2013) and Hattie (2009) they worked to shape a collective narrative that located "what changed" within (a) how they had provided explicit instruction and articulated learning goals, (b) how they had guided instruction and checked for student understanding, (c) how they had structured collaborative learning and provided a range of feedback on student work, and (d) how the independent tasks they assigned did, or did not, result in demonstrated student learning. The authors also wondered about the new roles digital tools played in these instructional processes. They realized that the majority of their students were born in this century and that while the popular press might describe them as "digital natives," such a designation obscures the different levels of access to and adeptness in online learning (Thompson, 2013).

From this common framework, the authors each developed one section of the narrative to combine their different perspectives. The researchers engaged in focused dialog to make meaning of new individual and co-constructed experiences (Hamilton et al., 2016). They found it difficult to write faithfully about each other's experiences, even after working together on the preliminary organization. They felt the challenge of capturing the needed information in detail without putting a "spin" on one another's experience. They were cautious in decisions about how much to reveal about individual school and student situations, so that no one needed to feel vulnerable. Overcoming these challenges, the authors followed Bohm (1996) in endeavoring to co-create meaning without imposing individual perspectives as if speaking for the group. Loughran and Northfield (1998) similarly would identify the authors' work to check one another's interpretations as an essential dimension of self-study.

The categories for analysis often felt intertwined and overlapping as the authors sought to identify *change* as something more than inconvenience or unfamiliarity. As the authors note in the conclusion to this paper, this painstaking process of shared meaning-making proved difficult and yet powerful as professional development.

Teaching Contexts as the COVID-19 Pandemic Began

The analysis in this paper focuses on teaching and learning environments, instructional purposes, and 21st century tools

during the Spring 2020 COVID-19 pandemic, and the academic contexts of the teachers/researchers are presented here as organized by these topics.

A long-time ELA teacher educator at a local public university, the first author taught an online cross-content area course, Introduction to Teaching, before and during the pandemic. For her, the "schoolhouse" was already virtual and asynchronous. Her students were undergraduates who either sought teacher certification or considered other careers that would intersect with schools and adolescent lives. Many of her students were parents of young children, and many lived in multi-generational households. Her purposes in teaching the course included introducing future teachers to multiple digital tools that they could use for communicating with students and parents and might themselves adapt for teaching a wide range of content. She was further intent on guiding future teachers to use digital collaborative tools for sharing ideas and facilitating projects, including creating presentations and videos to organize and deliver information. Digital tools already in use in the Introduction to Teaching course included Canva, Smore, Padlet, Coggle, and Flipgrid; all materials and assignments were housed in a Blackboard learning management system shell. Students were expected to independently access Blackboard multiple times a week. The only synchronous requirement was for students to manage and complete assignments in small groups, with optional "live" office hours regularly offered for students who wanted immediate feedback.

A veteran ELA teacher, the second author taught in a suburban district outside a major metropolitan area. Her four reading/writing intervention classes and two Gifted and Talented (GT) English classes were governed by the state curriculum standards and the district's instructional model of reader's/writer's workshop. Prior to the pandemic, all her classes, set in the traditional schoolhouse, were aimed at mastery-based learning: lessons were driven by specific learning goals; students received actionable feedback with opportunities to revise their work; they were encouraged to reflect on and fine-tune their reading and writing processes; the emphasis on grades for motivation was minimal. Student ownership of learning was fostered, and students routinely engaged in conversations both with each other (during turn-and-talks, peer reviews, small-group and wholeclass discussions) and with the teacher (during student-teacher conferences, small-group and whole-class discussions, and oneon-one tutorials). In the intervention classes, students completed most assignments using pen and paper, though in the quarter preceding the pandemic, online tools (Office 365 and *Itslearning*) became part of instruction. In the GT classes, the same online tools were routinely used to communicate assignments, share resources, and facilitate group work.

A decade-long ELA educator, the third author taught in a large school district at an inner-city, single-gender, magnet school with an exclusive focus on Pre-AP and AP curriculum. Set in a traditional schoolhouse, all classes had a "college feel" in terms of rigor, with expectations and standards higher than in a typical high school in the district. The AP English Literature class (twelfth grade) was finishing a study of *Othello* and moving toward metaphysical poetry and *Frankenstein*, as well as preparing for the AP exam in May. His Pre-AP English I classes (ninth grade) were finishing a study of *Lord of the Flies* while transitioning to the quintessential work of ninth grade: *Romeo and Juliet*. He also taught an AP Research class and served as class sponsor, supporting student extracurricular activities like My Sisters, My Tribe Mentors and Rose Runners, the school's running club. Prior to the pandemic, the district's learning management systems, digital resources, and Google classroom were all in regular use for student access, completion, and submission of assignments.

DISCUSSION OF THEMES

Changed Environments

How do veteran teachers employ their hard-won expertise for creating and managing dynamic places for learning when the schoolhouse is disbanded and home schooling becomes a norm? If the brick-and-mortar building no longer organizes time and relationships, how do routines and rituals change for teachers and students?

In thinking about changes to their teaching environments, the authors first describe how the transition of course content happened when the pandemic forced abrupt school closures. They then discuss specific changes in the school day that resulted (bell schedules, instructional spaces, classroom routines). Finally they consider home-based learning and grading: how the new environment for teaching and learning led to changes in assessment and the communication of student progress.

Transitioning "Leftover" Course Content to the Online Environment

As veteran teachers, the authors each had hard-won expertise for creating and managing dynamic places for learning. The shift to emergency online teaching stretched them by requiring new routines and the deployment of new digital tools for communications with individuals and classes. Because the brick-and-mortar building no longer organized time and relationships, routines and rituals changed for teachers and students. Established strategies for funneling student energies and requiring student engagement had to be reconsidered.

In the beginning of the move to remote teaching, the fact that teachers were physically removed from their students had an immediate effect on what happened instructionally. In the second author's reading/writing intervention classes, designed to help students improve their performance on the state assessment, it quickly became clear that the distance learning format was challenging for many students. While some students produced thoughtful, well-written compositions, others never completed or even attempted the essay.

In contrast, the second author's students in the GT track quickly adapted to the new instructional mode. They independently engaged in a discussion-board assignment, posing thoughtful questions about a book review by Jennifer Szalai of Patrick Boucheron's *Machiavelli: The Art of Teaching People What to Fear.* The instructor saw most students engage in layers of

sophisticated text analysis online, drawing on previously learned skills of discussion and interpretation.

The first author's students were midway through a collaborative digital project on "Big Ideas in Education Policy." Whereas the class normally required teams to work together closely, it became clear that many students were now in complicated family situations and under work and other time pressures because of the citywide closedown. In collaboration with instructors of other course sections, the requirements were truncated, and students created short individual presentations covering sections of the original assignment. In self-evaluations of their efforts and learning, students reported new understandings of their specific topics, but to the instructor they had missed a broader perspective on why the "Big Ideas" might matter to them as future teachers.

The move to remote digital learning seemed to go smoothly for the third author's students, as laptops were already a part of the district's one-to-one initiative at the secondary level. Also, digital tools and resources were commonly woven into lessons and curriculum prior to the pandemic, so the students were familiar with certain aspects of such online learning platforms as Google Classroom and Itslearning, while other platforms like Microsoft Teams were newly explored. In the ninth grade Pre-AP English I course, students turned in a mandala project for their formative assessment of Lord of the Flies, using an assignment feature in Google Classroom. In virtual department meetings, some of his colleagues wondered aloud about whether it was appropriate to assign creative projects for their courses, even though an online learning platform like Google Classroom allowed teachers to create and assign assessments that have such components. The third author advocated for keeping creative assignments because they could help students cope with stress and isolation.

Thus in the early days of emergency teaching, students and teachers alike were generally able to jump into the new situation with some known procedures and tools. Students could be seen making progress toward course goals, but their participation was uneven. Being familiar with digital tools and resources prior to the transition saved some troubles, like difficulties with logins and basic functionality that usually accompany new software. But the authors sometimes felt teaching was like operating a customer service or tech troubleshooting hotline. With a constant flow of new administrative decisions, the teacherresearchers found that their teaching needed to adapt as quickly as they would have in a physical classroom where a fire drill or unscheduled assembly or pep rally can upend careful planning. Students also suffered from tool and resource overload as every course and teacher increased their uses of what was familiar or adopted new strategies.

Bell Schedules

A high school's bell schedule governs the allocation of time for everything that happens on the campus. Without such a common organization, each instructor's school determined new patterns of time to support synchronous or asynchronous instruction. Student and teacher internet access and connectivity were also an important part of the challenge. Some schools required students to be online and "in class" for extended periods of time every day. Others followed a freer model, having students turn in worksheet packets or other assignments as they finished, with no virtual meeting component. Of the two high schools represented in this paper, one decided on a weekly structure that included periodic synchronous class meetings using Microsoft Teams, while the other allowed teachers to hold synchronous meetings as long as students attended on a voluntary basis.

The authors each adopted strategies of office hours and other informal meetings in order to explain upcoming assignments, answer questions, or offer tutorials. They sought to create a measure of predictability and offer teacher availability, using time in ways that could support student progress. Each of the authors used digital tools and the online learning platforms for one-on-one conferences and consultations with students. The second author found herself spending hours every week on communication with individual students and their parents. In fact, her main approach for helping students who lagged in completing assignments was one-on-one tutorials: by email, through Itslearning messenger, in Zoom, or via Jabber (a districtapproved phone app). She was able to walk the students, in need of help, through the necessary steps in completing assignments, although she was not always able to get in contact with students who might have benefitted, or their parents. For the third author's AP Research course-in which students were at the point of gathering research and developing their academic papers-the Microsoft Teams video feature allowed one-on-one conferences with students about their writing projects. Individual conferences were already an instructional practice in the course but holding these digitally allowed the students to maximize their time. The first author found her students made increased use of her online office hours once the pandemic shut-down seemed to keep them from easy access to peers who might have advised them or clarified assignments. All three authors struggled with maintaining consistency with time allotments for students when there was no longer the structure of a bell schedule or other indicators to delineate school hours and the working day.

Instructional Spaces

Expert teachers have many ways to use the physical environment to support the learning in their classrooms. High school classrooms are often as unique as the personality of the teacher who occupies the room, arranged to facilitate instructional activities and minimize distractions. Online spaces were not so easy to adapt or to recreate as virtual learning facilities.

While creating a mostly asynchronous learning experience for her students, the second researcher delivered explicit instruction through video, PowerPoint, and learning paths (a feature of *Itslearning*), and facilitated asynchronous student collaboration through discussion boards. She spent multiple hours every week communicating with students through email, *Itslearning* messenger, and Zoom tutorials, and with parents by email and Jabber.

The third author's school district chose to widely adopt Microsoft Teams, which was already available on student laptops.

Teachers were required to meet with classes using the video conferencing function, so that students could still feel connected to and engaged with them. Screen sharing capabilities allowed for instruction that would have used a document camera in a physical classroom. Chat room features allowed students who did not want to be on camera to have their words still read and heard through class discussions.

Other routines of the school environment included protocols for protecting student privacy, and these too proved complicated during emergency online teaching. Some promising instructional tools were disallowed because they lacked security.

Conferencing platforms like Zoom and Microsoft Teams gave students the option of showing their faces. While teachers had to be on camera during the virtual class, students were not necessarily required to show their presence: they could put up avatars or pictures of themselves, in keeping with school privacy regulations.

One school developed a virtual etiquette PowerPoint presentation with tips on how to navigate distance learning. In another school, the teachers could not require the students to attend video conferencing sessions, much less students' video presence in the meeting. In both cases, teachers were not certain whether students were actively participating when they did not have to show their faces. This also raised questions of attendance and presence. Transactional relationships between the teacher and the student became severely disjointed when the student's face was concealed and the teacher could not read facial expressions or observe gestures.

Classroom Routines

Teachers typically design their classroom spaces to reinforce routines (for turning in papers or holding conferences) and norms (for small-group collaboration or whole-class discussion). From the first weeks of school, teachers invest time and effort in building these routines, adhering to Wong et al. (2009) dictum that "readiness is the primary determinant of teacher effectiveness" (p. 92). While recognizing that routines and procedures are central to maximizing learning and minimize discipline problems, the three authors typically begin their courses by describing and modeling different classroom procedures to ensure students have a clear understanding of how the classroom is set up for their success. Even in online courses, students learn habits for submitting work and norms for working together and holding each other accountable.

For veteran teachers, who for years have been fine-tuning classroom tools and routines, classroom management skills become almost automatic—in fact, they become second nature. That is why and how veteran teachers can accomplish so much. But not all these skills could make the transition to online teaching.

One area that was profoundly affected by the new emergency online teaching, especially for the high school classes, was submission of assignments. The teachers had to translate the usual procedures for assignment submission and follow-up into a digital format administered at a distance. While "the dog ate my homework" might no longer work as an excuse, teachers found that tracking student work involved new routines and unfamiliar processes. They lost a fundamental "control" by no longer being able to track down students, hand them assignments, and confront or cajole them—directly communicating about what was due, what was late, etc. In the emergency online environment, the greater control of the use of online learning platforms, like Google Classroom or Microsoft Teams, gave students many more ways to hide, to procrastinate, and to avoid responsibility altogether.

To translate her physical classroom into online format, and hopefully anticipate the challenges that come with greater student autonomy, the second researcher invested time in designing a landing page that was straightforward and attractive, strategically using images and fonts to make page content self-explanatory, so the process of accessing and submitting assignments would encourage student participation. At the end of each week, she archived old assignments (while making them easily accessible) and prominently posted the upcoming assignments. She maintained this practice throughout the semester, understanding the students' need for both clarity and stability at a time of confusion and uncertainty.

At the administrative levels of each of the authors' institutions, decisions were made about instructional expectations in the new emergency context, and these shaped the instructors' decisions about their class assignments and teaching practices. For the first author's class, the established weekly rollout of assignments with a collaborative synchronous component changed to a list of assignments required for course completion posted all at once: students were thought to be more likely to be successful if they were working independently and at their own pace. For the second author's classes, school administrators imposed limitations on weekly expectations: asynchronous learning tasks could take no more than three hours of work for "on-level" classes, or four for advanced ones. All deadlines were set to Sunday night, which meant that only one lesson cycle could reasonably take place during each week. In the third author's case, the limitation of two 30-min synchronous lessons per week made the previously planned rich instruction difficult to deliver as lessons became rushed. However, he found the real difficulty came from a weekly one-hour limit on homework, which made it impossible for students to engage at length with texts of any level of complexity.

Online Resources and Instructional Tools

All three authors were used to teaching in places where both they and their students would have easy access to resources. For all of their students, the authors needed to be sure that digital collections were accessible through school systems or the local public libraries, even as the buildings were also closed. They found that some families had home libraries or other resources to support their students, but there were significant disparities within class groups.

The authors realized that there were powerful online teaching tools available, even if not all students embraced or benefitted equally from them. Each author searched for new tools to meet a wide range of instructional needs, and they discovered options that they had not known were already available to them through their schools. The authors found it was sometimes difficult to compare the utility of different programs and platforms because of the way each had been customized by the administration in their individual settings. Yet they found many tools to be worth sharing with each other for supporting ELA instruction.

The first author felt new appreciation for the move the Introduction to Teaching instructional team had made to open access resources in a previous semester. Through the established Blackboard course shell, students had all the reading materials they needed to complete the assignments of the course. The authors recognized the useful immediacy of digital texts, and their important ability to ensure students had access to readings and materials. As his twelfth grade AP Literature students were preparing for the AP exams, the third author assigned digital texts in the district's Itslearning system so that students could access the materials and prepare for discussion in the virtual classroom. He was able to pull up the text and have it accessible in Microsoft Teams to allow for better student participation in the discussion and better visual connection with the text. He also used a timed writing assessment feature in Itslearning that allowed him to set testing parameters. This tool was particularly valuable for helping the students prepare for the upcoming AP exam, as the College Board announced it would administer these tests in a digital format.

Prior to the pandemic, instruction in the second author's classes relied heavily on visual elements: PowerPoint's features that enabled the use of text color, graphics, images, and videos—ushered in through the animation feature—supported the presentation of mentor text excerpts, anchor charts, and teacher's models; the lessons' visual components were accompanied by in-person think-alouds and explanations. Once remote teaching began, the written components of lessons seemed easily translated into virtual format; in some cases, think-alouds and explanations were recorded in PowerPoint notes. The second author also used select Study.com videos to supplement instruction presented in written form. Voluntary 30-min Zoom meetings on Fridays allowed the second author to provide students with an explanation of assignments, answer questions, and offer tutorial help when necessary.

In order to help his students to prepare for the AP exam, the third author scoured the internet looking for digital resources so that students could practice their analytical skills and review topics in AP Literature. College Board not only released contentspecific information for the upcoming testing season, they also created daily master-teacher led live YouTube videos for students to watch and participate in content-specific assignments and activities for the newly adapted-to-online exams. Another resource the third author found for his students was a "choiceboard" for assignments that prepared students for specific question types on the AP Literature exam. These choices of different mini-assignments were aligned to the questions students were told to expect on the exams.

Learning From Home

Sending students to their homes while continuing their education redefined learning spaces in entirely new ways. Even for the first author's class (already online), the new necessity that whole families shared physical learning spaces made for new challenges for students. Bedrooms and closets and couches became classrooms; dining room tables became workspaces; and kitchens for some were simultaneously lunch lines, teachers' lounges, and study spots.

While the authors recognize that even in normal circumstances the learning contexts for students are not uniform, the move to online teaching meant maintaining one school classroom culture in a multiplicity of home classrooms (more than a 100 different homes for each instructor). The home learning of every student changed, even if the course was already online. Rules and guidelines govern many houses: chores and standards are in place to make children successful members of society. When school went home, it seemed that some parents and students lost a clear division between educational rules and procedures and home rules and procedures. Student success became more obviously the responsibility of the parents and guardians of households, and inevitably some students were left to fend for themselves. There were all the usual pressures on families, and in addition the pandemic situation did not uniformly impact workers with children.

Because the students were at home, the online emergency classroom was sometimes strangely public. University students sometimes inadvertently revealed more of their homes than they intended, especially when their realities now included children suddenly at home and other family obligations. One student who contacted the first author for help on assignments described how she and her husband were housing elderly cousins who had been kicked out by other family members. As she FaceTimed with the instructor, she wrangled her small daughter and wondered aloud how the family could figure out a way for everyone to get along.

The instructors also found they were sometimes teaching to an audience that included siblings or parents, sometimes oblivious that a teacher in the middle of instruction should probably not stop to answer a question—especially a confidential one specific to one student's progress. Other times the instructors worried about what aspects of class might be overheard and judged out of context.

Consequences of the Emergency Learning Environment for Grades and Expectations

The institution of each author enacted new policies for grading in order to be fair to students who were suffering from the pandemic shutdown and its multiple effects on employment, family situations, and health. The emergency online teaching situation highlighted differences between student compliance and student learning as grade policies changed and revealed multiple dimensions to what motivated students to complete work.

The third author was determined to maintain the integrity of his classes, especially in terms of expectations for his students. He felt keenly that there were still 12 weeks of school left, and that this meant there could be a lot of learning—especially because state testing requirements were dropped, and so formal test preparation was unnecessary. His school district determined that students would receive completion grades for the last part of the school year. District leaders decided that students would still receive numeric grades (for the determination of GPAs): students were not to have their averages harmed in any way. There were to be no penalties for missing or late assignments once online teaching began. Thus the third author was stunned to be called into the virtual principal's office to hear about student and parent complaints about the work he was assigning. He was exhorted to show students "more grace," but that seemed to be mostly a demand for lowered expectations. He had given students a calendar of assignments from March to May that closely mirrored what his normal curriculum would be. The instructor did not want learning to end: this was an extension of his normal "bell to bell" classwork attitude, part of why he had been recognized as "teacher of the year" two years prior. His determination to maintain high expectations did not mean he was any less interested in his students' challenges. He was used to listening to their woes and anxieties and determining when it was reasonable to give them "grace" on late assignments. But now he felt his teaching expertise to be under attack. He felt that his campus, one that touts the pursuit of excellence, with goals of college readiness and becoming global citizens, was losing its way in trying to respond to the pandemic and keep everyone happy.

For the first author teaching at the local university, the Provost determined that students would decide for each course whether a posted final grade would be replaced by a credit that would not impact their GPA. The first author's grading policy endeavored to be both fair and simple: she posted all the remaining work for the semester and told students they could complete the assignments for an A or just the final paper for a C, which they could then change to credit. Ultimately she struggled with her own policy, because she wanted to reward quality efforts and acknowledge those who had worked hard from the beginning of the semester. The first author felt conflicted. New policies for grading and "grace" in the face of the incredible pressures of the pandemic meant working for as much student success as possible. As a result, a student who would likely have failed in a different semester, who turned in a largely plagiarized final paper, received credit because of the original introduction and conclusion. Another who admitted she thought she had "dug a hole way too deep" and had quit on the course hacked out a final paper in 24 hours in order to complete enough to earn a D.

The second author employed digital rubrics and checklists to provide feedback and assess student learning. The second author's district decreed that failing grades could not be given for the first progress report, and only *Pass* or *Fail* were to be entered for the fourth quarter of the school year, with 60 being a passing grade. As teachers who had taken pride in their status as professional decision makers and educational leaders, it was difficult to take part in the administrative decisions that were being made largely without them.

Newly Focused Purposes

When the new strictures on time, scheduling, and curriculum alter priorities for student assignments and assessments, must instructional purposes change?

Articulating Learning Goals/Purposes for Learning

The articulation of learning goals in an ELA classroom was made even more difficult in the emergency remote-teaching situation. The recursive, organic nature of ELA standards meant that decisions about sequencing, specificity, the number of goals in a unit of study, what to include, what to not include were complicated by new restrictions to time and interaction with students. Even in familiar teaching situations, teacher scopeand-sequence choices are an art, as some goals may need to be added in the process of teaching when a new direction for learning emerges.

In face-to-face ELA teaching, goals and purposes must be constantly communicated to the students so that they can have a clear understanding of the instructional direction. During emergency online teaching, a weekly overview meeting in Zoom allowed the second author to communicate her purposes for the learning activities she was requiring. She also posted one or two specific learning goals on each course home page weekly. Without regular in-person communications to explain and reinforce these goals, students came to believe that some work was only assigned to keep them busy. It was possible that a combination of too many discussion boards and not enough communication about their purpose may have resulted in this perception.

As his ninth-grade students began their study of Romeo and Juliet, the third author's primary goals were expressed in his anticipatory set of activities that asked students to explore William Shakespeare and his influence in the twenty-first century. In one assignment, students used the Folger Library's podcast series Shakespeare Unlimited to expand and share new knowledge about the life and works of William Shakespeare. To further his student's exploration into Shakespeare's current influence in society, the instructor created an I-Spy Shakespeare assignment, where students looked at photographs of extensive Shakespeare memorabilia and adaptations (statuettes, an "insult generator," children's editions, graphic novels, "to thine ownself be true" lip gloss, etc.) and answered questions in a Google Form. Thus he recreated online the kind of opening purpose-setting activity that required students to engage in the question of why Shakespeare is still studied in schools and continues to influence society.

When the pandemic altered the semester by canceling whole weeks, the first author needed to rethink the project and research expectations for her students. Her purposes for activities were also less clear when she could no longer expect students to report on observations from visits to schools, which were now closed. Prior to the pandemic, the cornerstone of the course was at the intersection of her students' previous school experiences, their review of peer-reviewed research, and their new adventures visiting classrooms and observing from the perspective of a future teacher. The course seemed off-kilter when the very definition of school and classroom had to incorporate the reality of emergency online teaching.

For all three authors, emergency online teaching changed their abilities to reinforce course expectations and remind students of the goals and purposes for what they were required to do. In addition to thwarting the way teachers could communicate *about* goals, the change to online teaching further challenged teachers who wanted to utilize explicit instruction and group work to *reach* those goals.

Explicit Instruction

The first and second authors, who taught asynchronously, delivered explicit instruction primarily in written form, at times supporting it with video resources available on the web. The third author delivered English literature curriculum with oral instruction using virtual live lectures, feedback, and commentary in real time using Microsoft Teams.

Already teaching online, the first author had developed an extensive collection of materials to support students as they learned to consult peer-reviewed research in online databases and make sense of it in light of topics related to teaching which they had chosen to know more about. These materials included readings and videos to view, with expectations that students would use online discussion boards and other digital platforms in order to share what they had learned and work systematically toward a final paper.

In her reading/writing intervention classes, to guide the students toward writing a book review, the second author used Gary Paulsen's The Island. Over the course of several weeks, she guided students' reflections about their self-selected books by sharing weekly models of her thinking about different aspects of her book and asking the students to do the same for theirs. To scaffold the students' reflections on their books, she shared simple sentence starters including "When I started reading, ..."; "I realized that"; "What I found especially fascinating was"; "I am happy to finally get to the part where . . ." She also supported student review of literary content with Study.com videos on topics like archetypes, and static and dynamic characters. At the end of the unit, the instructor supported student use of genrespecific language as she shared her book review about The Island as a model, accompanied by a list of sentence starters-like "When readers enter the world of . . . "; "This choice by the author ..."; "One interesting feature of ..."; mirroring those used for the reflections written throughout the unit. Each digital lesson was housed on its own web page linked to the course home page. Students submitted their reflections through a Microsoft Form linked to the home page, and their book review through an Itslearning assignment portal.

In the GT classes, the second author delivered explicit instruction in PowerPoint. She used the notes function to provide instructional commentary. She had planned to record a voiceover for this lesson, but then decided to try it in a written format only, thinking it would be easier for students to navigate. This was a lesson on employing rhetorical moves in an opinion piece, an exploration of Martin Luther King, Jr.'s "I Have a Dream" speech. In the PowerPoint lesson, she combined excerpts from the speech with instructional commentary that highlighted King's use of repetition, metaphor, allusion, and antithesis to convey his vision for a just and free America.

As his twelfth grade AP Literature students were beginning their study of *Frankenstein*, the third author provided them with PowerPoint notes about Mary Shelley, Romanticism, and other topics students would encounter throughout their reading and study of the novel. His being able to present PowerPoint lessons through screen share in Microsoft Teams gave students a sense of normalcy under these new conditions. The platform's video conferencing function even enabled all students to be seated in the "front row" of the classroom.

Collaborative Learning Supported by Feedback From More Than the Instructor

Student peer-to-peer interactions often felt curtailed in the online teaching environment. Even as students could be potentially connected through Facebook or a wide range of social media apps, teachers felt constrained in requiring peer work or other synchronous interactions between students during synchronous class times. They used discussion boards and other digital tools to facilitate small-scale informal one-to-one sharing of ideas or work between peers. All three authors struggled with how much to trust that learning was happening in the different online discussions, and how much to monitor and perhaps to give feedback or grades for collaboration. In addition, all three authors typically employed different peer-critique strategies so that students would read and learn from one another's work. This too was made more complicated by the online learning situation, although the reasons for the problems were sometimes more a result of lost student motivation rather than technical or scheduling difficulties.

In the first author's original plan, the arrangement of course assignments guided students through learning while collaborative assignments were intended to provide opportunities for small groups to construct deeper learning. Changing this so that all assignments were posted at once and the collaboration requirements were removed, the student workload definitely became more manageable. Student reliance on the instructor increased, where they asked for clarification and assistance which was previously provided by peers. Without peer feedback and commentary required on written assignments, students lost the opportunity to hear from a wider audience than just the instructor. Instead of consulting with the small groups of classmates they knew well and shared interests with, the students were on their own. Although they were encouraged to stay in connection with their assigned groups from before the pandemic, it seemed that when the course no longer required collaboration, the students largely wanted to be independent and self-pacing in their work. While this may have felt more efficient in the strange times that they were in, their instructor felt they were losing out on a lot of potential learning.

In the second author's classes, students' collaborative learning using discussion boards did not usually receive individual teacher feedback. While she specifically commented on certain features of the quality of the discussion, this feedback did not extend to small groups—all discussion boards were set up as wholeclass conversations. Individual students received feedback on their discussions via a rubric that included checks or check minuses for each performance descriptor, and a numerical grade. Because there were two similarly styled discussion boards exploring text content, the assessment of the first discussion served as feedback in preparation for the second. For writing assignments (argumentative essay, book review, opinion piece, literary analysis essay, and creative response), individual feedback prior to grading was provided by the teacher in Zoom tutorials at student request, or sought by students from peers. This meant that feedback was not provided systematically to all students during the collaborative learning phase. In the GT classes, students did receive feedback on their opinion pieces from their peers in a formal discussionboard assignment.

The third author's AP Research class used video conferencing to provide virtual face-to-face peer revision and editing during the last stage of writing their academic paper. This allowed students to schedule their own conferencing with their peers, as well as to provide live commentary to each other, rather than simply emailing papers and providing written feedback. This collaborative experience allowed students to receive multiple perspectives and viewpoints because of the quicker response time, which became time well spent in the crunchtime of submitting final papers. Because these students have been introduced to the revision and editing process in their formal ELA courses, their collaborative experience showed a new way they could independently use this tool for similar assignments. The students were given the resources that allowed them to take the initiative in their own use of digital tools in the future.

The authors found that online teaching exacerbated the contrast between students who work because someone is watching them, "making" them work, and those who engage in a topic or task because the social dynamic makes the work matter to them at some level. This question of not only motivation but the teacher's role in generating engagement also impacted student reading and writing.

Online learning seemed to heighten student desires to work through materials at their own pace, focused on individual progress and completion. Such preferences seemed to work against meaningful collaborative work. When asked about their workload, the second author's students told her they objected to her setting a midweek deadline for an assignment that had to be completed before she posted the next assignment. Some students wanted to finish faster. The second author explained that certain assignments had to be completed as a prerequisite to others. For instance, a peer-review discussion board needed to be completed before students could move on to taking their pieces through the rest of the process she scaffolded for them. Similarly in the Introduction to Teaching online course, the first author had designed assignments to take advantage of peer interaction, and thus demand what might be called semi-synchronous attention for discussing readings and viewings. When these were no longer mandated, in the name of the pandemic and the hard situations of many of the students, the established groups disbanded and students seemed relieved.

Students in all of the classes described in this study seemed to want more independence and autonomy in their online learning, and as a result they seemed impatient with collaboration even when they were happy to connect with and hear from their classmates informally. Their instructors worried about the diminished quality of student engagement in work when the only audience was the teacher and the only motivation was sufficient compliance to earn a grade.

Independent Tasks and Evidence of Learning

All three instructors struggled with the fundamental ELA work of interaction with texts: of students not only reading but expressing their understanding through discussion and writing. The new virtual timelines and expectations altered the pace of reading texts. Students were required to do more reading on their own while teachers had fewer opportunities to check for their understanding. This was the case for the third author's twelfth-graders and their reading of *Frankenstein*. Because the campus is STEM-focused, when students recognize themes about the nature and limit of science, these usually had led to rich in-person discussions that could branch and merge into much longer, deeper explorations of the text. But virtual class discussion lost the richness and variety and ended up more streamlined and focused on basic clarification of content, with class sessions feeling rushed.

While the second author's flipped lessons guided students through a series of complex steps, and were intended to supply necessary information gradually, she found it difficult to include consistent checks for understanding. This seemed especially problematic in her reading/writing intervention classes, where the content was largely new and she chose (in contrast to the GT classes) not to use *learning paths*—a tool in *Itslearning* that allows the teacher to control the order in which students complete tasks—deeming this tool confusing to the students who had not used the online learning platforms in her class most of the year.

Before the pandemic, the first author's students were expected to discuss readings and share their understanding with each other in required small group interactions. As assignments "opened" each week, students had to connect with their classmates in order to complete short reflections and other collaborative responses to readings or viewings. Without that structure for some synchronous learning, students may or may not have needed to do the readings in order to complete the work. The instructor would have needed to create new quizzes or other kinds of independent accountability assignments to make up for this lost collaborative meaning-making, and of course the broader goal of changing expectations during emergency teaching was to lessen the pressures on students.

In the second author's intervention classes, independent reading was required to complete assignments; however, a student could have completed all assignments and gotten a passing grade with minimal reading. Students' writing assignments, completed without the teacher's help, for the most part, and assessed with rubrics, revealed a wider range of achievement: some pieces showing a weak grasp of expected skills and others a stronger hold on new content. In the GT classes, students also had to complete at least some reading in order to be able to work on writing assignments, but how much they read exactly is difficult to tell. They also independently completed a literary analysis essay on a scene from *Hamlet* and responded to the play by means of a creative piece (poem, story, mini-drama, letter, etc.). These compositions were assessed with rubrics, to which the students were introduced earlier in the year. The assessment of the analytical essays was very encouraging: student writing demonstrated sophisticated understanding of the play, application of the material from the PowerPoint lesson, and generally strong command of the conventions of the genre. Unfortunately, not all students submitted this assignment because at the time their attention was diverted by AP exams.

As an ELA teacher, accustomed to communicating instructions and analyzing models in person through discussion, the third author's characteristically dynamic instructionsupported by movement, conversation, and writing on the whiteboard-was difficult to translate into a remote-teaching mode. The third author's district limited his delivery of synchronous direct instruction to two weekly 30-minute lessons. In general, the third author found that it was difficult to get students to read. He equipped his students with reading guides to help them independently track their own understanding of the particular novel they were studying. Typically, students completed study guides as they were discussing texts in class, adding to their notes and gaining annotation skills and learning to provide evidence of the transactional relationship between the text and the reader. During in-person instruction, teachers are able to check for understanding and comprehension in efficient ways using a combination of written work and discussion. The instructor was worried that as the students were disconnected from the physical classroom, they also lost out on seeing his visible excitement and expressed passion for the literature.

Dynamic personal relationships with the teacher matter in making the hard work of learning possible. Instruction changed in the way goals and purposes were communicated, in the ways explicit instruction could be delivered, and in the ways specifically ELA teaching of reading and writing and collaborative meaning-making could happen successfully. Literacy and meaning-making felt like less of a school priority. Before the pandemic, teachers could lead discussions, demanding student engagement and skillfully managing their attention to texts and complex ideas. Even in the online *Introduction to Teaching* course, the presumed "real world of teaching and learning" was always described as a physical space. Much had changed.

Twenty-First Century Learning at Last?

When the pandemic hit, the authors were teaching classes that were already rich in digital resources, and students were regularly submitting assignments online. Nonetheless, when tools that had supplemented their classrooms became the medium for instruction, emergency online schooling gave the authors insights into their practices as ELA instructors.

The authors felt confident in their working knowledge of a range of digital tools: they regularly utilized learning management platforms as well as individual applications and websites in their teaching. What changed — what made the familiar glaringly unfamiliar — was the lost ability to introduce, discuss, troubleshoot, and adapt the tools to a particular classroom group. The teachers became exhausted by the need to add a layer of "digitizing" to their planning, preparing documents and assignments and discussion prompts and more. The second author felt this meant that she was preparing materials as if constantly writing for publication — immediately and every day. In part this was because of the presence of family members who were far more involved in some students' online lives, but the pressure also came from the need for clarity and completeness. Some of the pressure was a usual dimension of teaching, but the authors noted that the room for error was greatly diminished because of the limited time in direct contact with students. Verbal directions and modifications were now difficult, and there were significant time demands for creating videos, recording presentations, and otherwise moving digital tools into asynchronous instruction.

Whereas before the pandemic the authors could choose to adopt new tools and had some opportunities to try them out as supplements to instruction, it felt as if now each online interface had to work immediately and even seamlessly in order for a class session to move forward. As each teacher understandably uses the platform that is most familiar for them, students (and parents) can experience a barrage of different tools/expectations about how to access and use what they need. Some tools turned out to be better than expected more versatile and more engaging - while others had more ways to fail when students were on their own and not necessarily motivated to figure it out. The authors were all perplexed as they realized that "digital native" students, quick to try new social media and experiment with any number of ways to connect with their friends, were far less eager to troubleshoot a digital problem in order to complete a homework assignment.

The authors also noted that the tools that became the medium of instruction: Microsoft Teams, Zoom, and others in their districts/institutions (as discussed above) were fundamentally office or business tools, and their use needed modification to be appropriate in educational settings. Students were often expected to be silently attentive and focused on information in ways that would be unrecognizable in a physical classroom.

Robb (2019) studied student use of devices for virtual social connectivity and the degree this connection feels essential to adolescents, many of whom literally sleep with their phones. Even before the pandemic's enforced isolation highlighted the importance of social connectivity, the authors believed that being in a physical classroom together helped to focus students on learning rather than their devices. But schooling-related online work was only one dimension of students' digital learning and lives. In thinking about the changes brought by emergency online teaching, the authors believe there were profound differences because technology and digital tools were no longer supplemental and instead became central to course delivery and teaching. The authors felt the loss of the centrality of the physical classroom. Prior to the pandemic, no matter how many digital distractions were available to students, high school teachers could largely manage student use of devices during classroom time.

Student Feedback on 21st Century Tools

In a time of change, it seems especially useful and important for teachers to hear from students about their preferences and concerns—and to pay attention to signals from them that might be indirectly communicated. As part of an examination of their collective teaching practices, the researchers considered the evidence they had of students' perception of remote learning. In reflective commentaries. the second author's students reported they preferred those discussion boards that were driven by their own questions-there were two discussion boards of this type. Since some of the discussion board assignments involved peer review and publishing, the second author wondered if the students were less motivated by these assignments because they were focused on assignment completion. While the second author thought that student participation in all discussion boards documented successful response to and analysis of texts, she wondered how to communicate with students more systematically about the purpose of different discussion-board assignments, such as publishing, for instance, where students would benefit from collaboration. The second author also found that her advanced students did not share her excitement about the possibilities of Zoom for virtual class-times. During Zoom meetings, usually with twelve to fifteen attendees (about half of the class), students did not significantly engage in conversations, and asked questions only occasionally. She wondered if this lack of participation had something to do with the fact that all Zoom meetings were recorded, following administrative guidelines. In contrast the virtual meetings in the intervention classes, although usually attended by only three to five students, were energetic and interactive. Although few attended, those who did received focused individual help from the teacher.

The first author's online class was designed to include multiple opportunities for students to reflect and give the instructor feedback on their working processes and course assignments. She used this feedback to understand how to clarify assignments and where she might need to referee conflicts between students in small groups. When her course assignments were re-arranged and some processes compressed to finish off the semester, she discovered students needed her online office hours and frequent email queries to gain information and clarification on requirements. Several commented that they were now needing to navigate online requirements in all their classes, and how different instructors had made the transition with different levels of success. They may not have always loved the online design of the course, but it was familiar in the face of significant, even overwhelming change.

The first author gained new perspectives on the cost of digital tool use to the students. One told her it took him 27 attempts to record and not delete a 2-min Flipgrid video to post. Another decided to revise a pre-pandemic assignment on which she had scored poorly and sent in draft after draft of new material for an online newsletter. Another student gave up on a digital mind-mapping tool and created a huge handwritten version, painstakingly documenting each section on her phone's camera. Yet another student texted the first author at all hours because of Ramadan and when it was possible for her to work. It was gratifying that after many questions answered, and clarifications offered, this student finally realized she had more to write about than she had believed. The third author sought feedback from students as part of their reflection on studying *Romeo and Juliet* online. One student expressed a kind of love/hate relationship with online learning, which she appreciated for the resources while greatly missing the chance to act out parts of the play. Another student, writing in a "coronavirus journal," commented on missing her teacher and not having a sense of completion for her high school ELA experience.

As researchers, the authors considered how they could create future opportunities for students to communicate their views on what happens in the virtual classroom, and what can be gleaned from levels of participation and engagement about student feelings of comfort and even success in the new virtual classrooms. From the authors' perspectives, the loss of common physical space and increased student autonomy made distractions more difficult to navigate. The lost classroom culture for speaking and listening in an organized but dynamic way was a loss for teachers trying to scaffold meaning making through discussion: despite some rich potential for digital tools, the quality of classroom conversation often suffered. While the teachers wanted to support more student discovery and exploration, students sometimes lacked digital competencies to do so independently. Student fears of being wrong or feeling lost that might be recognized in a face-to-face classroom were more difficult to address online. With the decrease in collaborative learning, reliance on the instructor increased, and communication with individual students and sometimes their parents became more time-consuming.

By gathering feedback, the authors learned about student perspectives on the emergency online teaching and their use of digital tools. Students wanted and valued autonomy, preferring virtual discussions that were open-ended and student driven. They appreciated the variety of online tools but missed face-toface classroom activities such as acting out a play. While the teachers believed that the student workload was substantially decreased, some students considered it too high given the circumstances of the pandemic and the pressures being felt on many fronts. The authors suspect that students often missed the "normal" days of school, and their classmates and even their teachers. Unfortunately some of the strategies they knew, as teachers, that could have recreated in the online learning that would have seemed more like the usual functioning of their classrooms in terms of expectations for collaborative work and work production were believed to be too stressful or demanding for students during the pandemic, and these sometimes had to be abandoned.

CONCLUSION

The three authors understand that what they thought they knew about students and teaching, when they largely left the physical space of schools on March 12, 2020, has been challenged if not changed. As the 2019–2020 academic year continued through May and June, with proms canceled and graduations and other rites of passage celebrated mostly on screens, it was clear that they had completed a very *different* year. The rapid change from physical to virtual teaching caused educators across the nation to reconsider their vocations. Before, while each classroom was to some extent an autonomous island, physical proximity meant something: students and teachers and staff could freely walk and collaborate side-by-side. For many teachers, school resembled a close-knit hub, a hive, of education and learning. Losing the face-to-face, transactional relationships that are established in a school building truly altered the professional landscape. Even as digital tools are ubiquitous and the selfie, Youtube videos, TikTok, and other social media are central to the personas and personalities student create for themselves, many students chose not to engage in online learning, and hid their faces and home lives from their teachers and peers.

Years of technology-focused professional development and training have been tested on a massive, previously unknown scale and "wait, *what* are we doing?" has become a catchphrase. The sense of perpetual improvisation has not abated. The flexibility and adaptability of a teaching veteran that was once appreciated within a physical institution may now seem disorganized or random online to an exasperated parent or student. Administrators continue to make decisions and determine policies, but they can no longer draw from their own teaching experience or even observations of teaching from literally walking the halls of a school building.

To tell experienced professionals that "we're all first-year teachers" because of the mysteries of whole-scale online education is to give insufficient attention to how teachers are applying their best judgments and expertise as they work to make virtual learning possible. As this research demonstrates, educators are learning and adapting and improving what they can, as fast as they can. By focusing on teaching and learning environments, instructional purposes, and 21st century tools during the Spring 2020 COVID-19 pandemic, the authors explored how their experiences will have consequences in their future classrooms—in whatever new contexts they find themselves delivering instruction. Policymakers, administrators, and teacher educators should recognize the important questions raised here as local, national, and international conversations continue about online teaching and learning.

DATA AVAILABILITY STATEMENT

The data analyzed in this study is subject to the following licenses/restrictions: the article includes references to and materials from teaching in the Spring of 2020 by the three authors. Requests to access these datasets should be directed to laura.turchi@gmail.com.

AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

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