Twenty-First Century Middle Schooling in New York: Teachers Share Experiences and Perspectives on Remote Teaching and Learning Early in the Global Pandemic

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Abstract
In early 2020, the Covid-19 virus hit many places, including New York City, with such a force that nobody could have foreseen the events following its spread. The education system was pushed to transition itself to meet with 21st century technology. This study explores this disruption in the education system and how middle school teachers in several New York counties responded. What are middle school teachers' perspectives and practices during the rapid switch to remote teaching? Professor and graduate students in a Curriculum, Instruction, and Assessment class on middle level schooling designed the survey protocol focused on five related areas of the remote learning endeavor: (a) Preparation, (b) Teaching, Learning, and Participation, (c) Social and Emotional Effects on Students, (d) Monitoring and Assessment, and (e) Looking Forward. The findings demonstrate a primarily reactive response and limited preparation. Teachers express a mixed review of successes and struggles with online teaching and the challenges of engagement, participation, and meeting the social emotional needs of restless students who sometimes do not have the parent support or the technological devices that could further assist their success with online learning. Teachers had their own unique experiences and challenges teaching students through a computer screen.

Keywords
middle school, teachers, remote teaching, surveys, challenges

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"I think that this crisis is going to explode the achievement gap." This candid view that one middle school teacher expressed reflects a possible outcome to continual remote teaching. In early 2020, the COVID-19 virus quickly spread, including to New York City. Although the events overseas were a clear indicator of how seriously this virus could affect the US economy, health, and education, world governments downplayed the effects of the virus, and the United States was not prepared for the impact (Apuzzo, 2020; Gunia, 2020). Cities, states, and countries shut down, hospitals were overwhelmed with infected people, and schools were abandoned to an eerie silence. In some instances, with less than 24 hours' notice, teachers needed to shift their in-person teaching to an online platform. The education system was pushed to transition itself to meet with 21st century technology.

In a recent study (Kraft & Simon, 2020), teachers thought their success in the ability to meet their learners' needs dropped when moving to an online education platform. In an Albert Shanker June 2020 study, teachers self-reported 96.3 % success in meeting learners' needs when they were teaching in person prior to the pandemic. Teachers believed that in-person classroom learning allowed them to use the resources and tools they needed to meet more needs of all students including low-income students, English Language Learners (ELLs), and Special Education students. Yet teachers reported only a 73.1% success rate with their online teaching. Teachers also reported that a major challenge for remote learning is ensuring students have access to technological tools at home (Kraft & Simon, 2020). Lack of adequate technology resources, student supports, and teacher training during this tumultuous spring transition to remote teaching could all contribute to a widening student achievement gap.

Before this national study was published, we undertook to ask similar questions. To help understand this disruption in the education system and how middle school teachers in several New York counties responded, graduate students pursuing their 5-6 and 7-9 Middle Childhood Advanced Certificates (MCAC) surveyed a range of middle school teachers. Through the lens of student-centered readings and concepts from the Curriculum, Instruction, and Assessment (CIA) class in which they were engaged, students and professor designed a survey protocol to gather teachers' experiences and perspectives on five related areas of the remote learning endeavor: (a) Preparation, (b) Teaching, Learning, and Participation, (c) Social and Emotional Effects on Students, (d) Monitoring and Assessment, and (e) Looking Forward.

This article presents the context in which this study evolved, a brief literature review, methodology, the qualitative findings, and discussion on concerns and conclusions. The findings demonstrate a mostly low level of preparation and thus a primarily reactive response to sudden remote teaching. Teachers express a mixed review of successes and struggles with online teaching and the challenges of engagement, participation, and meeting the social-emotional needs of remote students who sometimes do not have the parent support or the technological devices that could further assist their success with online learning. Teachers had their own unique experiences and challenges teaching students through a computer screen.

Context

Graduate students complete the Middle Childhood Advanced Certificate (MCAC) to be more knowledgeable about young adolescents' development and needs and more engaged in the middle school philosophy, structures, culture, and CIA (National Middle School Association [NMSA], 2010; New York State Regents Policy, 2003). In this Hofstra University extension program, students are

Master of Science candidates, advanced undergraduates, or already teaching with their initial certification.

The Middle Childhood Director plans for MCAC candidates to interact with middle school teachers, even though New York State does not require field work for some Advanced Certificates. In the CIA class, one of the two required three-credit classes, students are usually assigned to interview a middle school teacher who teaches within the grades of the extension they seek, either the 5-6 or 7-9. In most past years, this culminating assignment has been completed individually with students focusing on a central topic or two from within or tangential to our CIA class readings, projects, and discussions. In spring 2020, as the class discussed the assignment in March, the university along with most K-12 schools in NY closed to prevent further spread of the COVID-19 virus. Thus, in an early synchronous class meeting on Zoom, we decided that rather than an interview, we would create a survey as a collaborative group on the topic on everyone's mind: What are middle school teachers' experiences, practices, and perspectives during the rapid switch to remote teaching?

Literature Review

Remote learning is not a new concept in the education world and has varied depending on age, grade level, and available technology. Prior to the COVID-19 pandemic, remote learning took place in schools and universities across the country. Even in 1997 (Webster & Hackley), effective distance learning included communicating using a variety of multimedia such as audio, video, and graphic links between two or more sites and insuring that students were learning through active involvement with high engagement activities.

In diverse school environments, many variables effect the implementation plans for remote learning to ensure that all students' needs are met. Teachers are dealing with more stressful environments in which norms constantly change (Russell, 2020), and teaching approaches differ in various ways (Assante, 2020). Teachers must be provided with leadership components such as technical expertise, regular feedback, and clear expectations, including an understanding of the target students. Researchers from a 2010 study (Oliver et al., 2010) further suggest that teachers designing remote work need a range of short training modules in areas such as using learning management systems, assessing learners online, and integrating Web tools.

Remote teaching can be a preferable style of instruction for students, especially for older students. According to Assante (2020), the benefits include relatively low costs, self-pacing, independence of time or place, accommodation of large groups of students, and possible increased retention due to the visual and audio messages. With remote learning, many teachers and professors make use of synchronous and asynchronous sessions which aids in flexibility. "Courses incorporating both synchronous and asynchronous means of communication were more effective than courses featuring only one type" (Owens et al., 2009, p. 55).

However, implementing remote learning includes challenges for students and teachers. While more research studies with middle school teachers and students during COVID-19 are needed, knowledgeable professionals have discussed problematic issues and guidelines. A first step is to ensure that students have the necessary tools to access online work. School districts and families vary in abilities to provide needed tools and resources. A considerable number of households do not have internet access. "In 2017, for instance, 14% of U.S. children between ages 6 and 17 lived without internet access at home. Most of them lived in households with incomes under $50,000 per year" (Morgan, 2020, p.

136). Some students also lack devices on which to connect to the internet. A National Foundation for Educational Research (Lucas et al., 2020) report from England found that students' level of engagement in remote learning was lower in schools with the "most deprived pupils." Parental support was also significantly lower for these students. Other noted concerns include lack of orientation or motivation to study, barriers to engagement with synchronous learning activities, and staff ignorance of these barriers (Owens et al., 2009).

Many student challenges tend to be social-emotional hurdles due to learning behind a screen. Problems preventing clear communication can make remote learning stressful, and students can receive differing levels of preparation or support from staff members. These social and emotional implications are especially important for students at the middle school level because creating high quality interpersonal relationships both student-to-student and teacher-to-student is essential for young adolescents' (10-15 years old) social-emotional health and development (Ellerbrock et al., 2014; NMSA, 2010). Social-emotional learning (SEL) can be built into the daily curriculum but can also be used as a stand-alone curriculum that allows the students to develop further social, emotional, and academic growth (CASEL, 2020a; 2020b). One study of an SEL program, Strong Kids, (Neth et al., 2019) with middle school students at risk for emotional and behavioral disorders, focused on promoting social and self- awareness, making responsible decisions, and managing relationships. The curriculum included trust building, open discussion on young adolescent concerns and feelings, and identifying caring, supportive adults. The researchers found through methods including self-reporting that students were dealing more effectively with internalized behaviors such as sadness and anxiety.

Each individual student will have a different remote learning environment from his or her peers. Some students may not have adult support when they need help and periods of isolation can have a dramatic effect on students' mental health. Students need to engage in SEL and maintain the interpersonal relationships they need as young adolescents moving through a singularly unique developmental time of their lives (Brown & Knowles, 2014; Ellerbrook et al., 2014). Feeling isolated, missing face-to-face contact with staff, and lacking confidence in managing the technology associated with their work are all social-emotional concerns (Owen et al, 2009; Snelling & Fingall, 2020). "Children experiencing isolation and quarantine have shown an increased risk of developing post-traumatic stress disorder, anxiety, grief, and adjustment disorder" (Fantini, 2020, p. 2). Teachers must be aware of factors surrounding students and their academic and personal lives, make flexibility an essential teacher instructional adaptation, and be creative to provide all students with a quality education (Parsons et al., 2018).

One way to make remote learning easier for children is to establish a set of instructions for children to return to if they need help navigating assignments. Morgan (2020) suggests that a step-by-step guide on accessing curriculum and online tools is beneficial and that using various formats such as video, text, and screenshots enhances the chances that everyone will know how the program functions. Fostering motivation and discipline will also help students complete the assignments during remote learning. Ana et al. (2020) noted that "if the students are not disciplined, it can hamper the learning process, and, more importantly, social interaction will be difficult if the learning process is not well planned" (p. 23).

A set of guidelines from The International Society of Technology in Education (ISTE) (Snelling & Fingall, 2020), a group of educators experienced with technology use in schools, provides a comprehensive perspective that addresses both academic and social-emotional aspects of remote teaching. ISTE identified 10 key practices for successful online learning that were garnered from teachers around the world. The first five help teachers to prepare and practice: *ensure digital equity*, with focus on access issues and special needs students; *practice,* including having regular digital learning days

and an established learning management system; *provide clear expectations to staff and parents*, including step-by-step guides and tutorials; *take time to prepare*, at least a day or two of staff training; and *pack your bag*, so that teachers have computer and essentials always with them. Strategies six through 10 focus on implementation: *establish daily schedules*, remembering that a full day on screen is a lot for students and teachers; *provide robust learning that engages*, not work sheets; *design independent learning*, not requiring much parental support; *address the emotional toll*, checking in with students and co-workers to address isolation; and *choose the right tools and stick with them*, limiting the number to avoid overwhelming students and parents.

Methodology and Methods

Our goal for the study was to understand how middle school teachers experienced and understood aspects of their rapid switch to remote learning and their perspectives of effects on their students and future learning. This qualitative approach allowed teachers to reflect on and share some depth on their thoughts, experiences, and feelings. Four of our seven MCAC candidates were also teachers making this same rapid transition, adding informed perspective to their input on survey questions and the environments in which teachers worked.

Process, Data Collection, and Participants

We began our inductive process with each middle childhood advanced certificate (MCAC) candidate submitting five survey questions around CIA issues for teachers in their current remote teaching situations. With a small class of seven MCAC candidates, we started with 35 questions. The professor compiled the questions and during a Zoom meeting, MCAC candidates reviewed their choices and discussed duplication and elimination. We noted the questions' falling into several categories that helped us to organize the survey protocol: Preparation; Teaching, Learning, and Participation; Social and Emotional Effects on Students; Monitoring and Assessment; and Looking Forward. With still too many questions, the professor narrowed the questions to 16. However, when MCAC candidates reviewed them, their own classroom teaching guided them as they sent back email comments including,

> I would just like to be cautious about overwhelming our interviewees with so many questions. Considering the times we are in, many of those we are interviewing are remotely teaching, working with their own kids, and managing the daily stressors that come with COVID-19. I think it would be best to remove a few questions or combine some.

Ultimately, the questions contained fewer ideas and were narrowed to 13. (See SurveyProtocol, Appendix 1).

We agreed that email was the easiest and most straightforward distribution solution. However, the professor reminded the candidates that they must collect data uniformly for credible responses and comparisons. The MCAC candidates agreed to send the teachers the survey within the same three-day period and request its return within a week. This would give participating teachers time to review the questions, think through the responses, and answer at their own pace. People responding in writing are usually more attentive to their exact words, sentence structure, and complete thoughts; giving this extra time would probably provide more thorough answers. The teachers received the survey in late April, when schools were in the fifth or sixth week of online learning. MCAC candidates could follow-up with teachers on this open-ended response, qualitative survey, if needed for clarity.

MCAC candidates typically used convenience when choosing a teacher to survey, including a colleague in the school in which they teach, a relative who teaches, or a former teacher of their own—often someone whose teaching they admired; the last group provided the study with participants having the most years of teaching experience. Seven teachers of varying experiences and subjects who worked at the middle school level in New York State completed the questions. All of them work at public schools. Three teachers work for New York City Department of Education, (NYCDOE), one works in Westchester County, one works in Suffolk County, and two work in Nassau County. The respondents teach Art, Social Studies, Math, Integrated Co-Teaching Math (ICT), English, Reading, and fifth grade (Math, Science, and Humanities) in a middle school. Their experience varies with two first year teachers, a third year teacher, a fifth year teacher, a 13 year teacher, a 17 year teacher, and one with 30 plus years of experience. Five are female teachers and two are male teachers. These teachers work in a range of teaching contexts in regard to socio-economic status. Ultimately, the three MCAC candidates and professor writing the article used as primary data the seven surveys and the paper that each student in the class wrote about his/her teacher (See Table 1).

Table 1
Participant Characteristics

| | Characteristics | | | |
	Gender	Content Area	Grade Level	Location
Teacher K	Male	Humanities	Fifth	Nassau
Teacher L	Female	Math	Sixth	NYCDOE
Teacher R	Female	Art	Sixth	NYCDOE
Teacher M	Male	English	Seventh	Suffolk
Teacher Z	Female	Reading	Six-Eight	Nassau
Teacher J	Female	Social Studies	Eighth	Westchester
Teacher D	Female	ICT Math	Eighth	NYCDOE

Data Analysis

All seven MCAC candidates were invited to co-write the article with the professor. Some had other obligations, but three responded yes. The data collected by all seven MCAC candidates contributed to this article.[i] The authors participated in Zoom meetings to discuss our analysis process and review writing as we progressed. Data analysis took primarily an inductive approach as we hoped to generate explanations and patterns based on particular data from these teachers who are in generally similar circumstances as teachers of middle schools (Gibbs, 2018). We did not start with theories or concepts to be tested. However, having read and discussed a common set of readings, we favored a lens that integrated CIA (Gross, 2002) and prioritized authentic experiences in student-centered learning, including choice and voice, social-emotional learning (SEL), and authentic and formative assessment. Thus, interpretations of what respondents say and do that developed from the data collection and analysis processes created new knowledge and understanding (Gibbs, 2018), yet the topics read about during the course influenced and contextualized this knowledge.

We began by drafting findings' sections based on the clear sections from the survey protocol. Each group member wrote two or three sections in a shared Google document. After group discussion of these drafts, each member revised his/her sections, often to include more data. We also determined the

need to include more individual quotes to share the teachers' voices and views. Each of us contributed to discussion and implications of the findings, and the professor edited a final draft which the student researchers reviewed.

Limitations

As a small qualitative study, the findings may be representative of middle school teacher experiences during the early weeks of the switch to online learning; however, they cannot be generalized broadly. More interviews would add to experiences during this stressful time. Respondents varied in gender, subject taught, years of teaching, and school context. They were not selected randomly; however, the relationships between MCAC candidates and the teachers they chose may have benefitted the research with respondent teachers feeling obliged to provide reflective and meaningful responses. The COVID-19 environment prevented face-to-face contact with teachers which would have allowed student researchers more exposure to specific school environments and nuanced details that a live interview enables.

Findings

Teachers had been working remotely approximately five or six weeks at the time of data collection. Sharing the voices of these seven middle school teachers increases the understanding of their experiences, practices, and perspectives during the tumultuous first weeks of teaching remotely.

Preparation

A wide range of online teaching experience can exist among teachers, including what they may have learned in a teacher preparation program, through their own initiative, or through their district training. Whether or not school districts provided these seven teachers any training for remote learning when schools closed in mid-March and how satisfactorily this prepared them varied. Overall, five out of the seven teachers felt that they and their students were unprepared by their district in the transition to remote learning. The two teachers who felt that they were adequately prepared were using 1:1 devices in their classrooms prior to the COVID-19 crisis (one iPads and one Chromebooks).

Even though Teacher K, a fifth grade Nassau County teacher, felt prepared because he had 1:1 technology using iPads in the classroom, he still felt that students were unprepared. Students left school not knowing that this was the last day that they were meeting in the classroom. Therefore, students were not instructed to take their materials and supplies home. Yet he believed the use of iPads both in school and at home helped with the transition. "Learning was able to continue, almost seamlessly, as we already have routines in place."

Sixth grade Math Teacher L felt that, "this situation was very hard to prepare for". Her district had three days of professional development for teachers to help each other figure out how to operate Google Classroom. Yet she felt New York City Department of Education (NYCDOE) and her specific school administration gave very unclear directions to the staff. Likewise, another NYCDOE, eighth grade Teacher D called the situation reactive rather than proactive and thought the city could have better used the few days that students stayed in school longer than their Long Island neighbors.

Five of the seven teachers used Google Classroom in their districts as a learning management system and agreed that students should have been shown how to use the system before being thrown into completing assignments there. Art Teacher R, also teaching in New York City, was given one day of training by her district for Google Classroom and was basically left to her own devices of trial and error throughout the fourth quarter. Reading Teacher Z in Nassau County stated that "most teachers prepared themselves; there was no formal preparation for what would be done." The only teacher who felt that she was adequately prepared was Social Studies Teacher J whose Westchester County district had already implemented 1:1 Chromebooks. Her school also had a technology teacher on standby to assist teachers with tutorials of how to use Google Classroom and help with any technical questions teachers had; administrators also checked in with each department.

Overall six of the seven teachers felt that students were not prepared and five teachers felt their district did not prepare them because the decision to close schools and move to remote learning was so rapid and unprecedented. English Teacher M noted that his school had no formal training, only videos. Five of the seven schools did not have 1:1 devices for students, and all school districts were uncertain if they would reopen at any point during the fourth quarter.

Teaching, Learning, and Participation

During the coronavirus pandemic, teachers and students were forced to adapt to the "new normal" quickly. Thus, both successes and setbacks occurred specifically in teaching, learning, and participation. Teacher R explained that technology was a huge adjustment for her.

> I am not computer savvy, so using a computer on a daily basis is a challenge in itself. Also, as an art teacher, my lessons do not come from a book. Therefore, I must create lessons that students can do on their own and also with limited supplies at home.

Teacher K talked about the changes in balancing work at home.

> [What] I have encountered with remote learning is finding the balance between work and home. Now that our work is in our home, it is challenging, more than ever, to separate the two. As teachers, we have quickly learned how exhausting it is to be in front of the screen all day.

Other teachers agree that teaching remotely is more exhausting than being in the physical classroom. Yet through trials and tribulations, teachers found effective ways to teach remotely. One effective way to teach remotely is to keep things simple so that students are not overwhelmed. Teacher L said,

> I think the most effective way to teach is by recording myself going through each lesson and example problems for students to refer to when they try their own… . Many of my students get overwhelmed when I post more than one thing a day in google classroom.

Teacher K found it best to keep remote teaching similar to classroom teaching for consistency. "This is a challenging time where routine and normalcy have been completely disrupted. Students have shown that they are more likely to attend the WebEx [synchronous meeting] when they know it is the same routine every day." By establishing some sort of routine, students will be more likely to complete assignments and/or attend live virtual meetings.

Similar to Teacher L's and Teacher K's thoughts on keeping simplicity and routine, Teacher Z said, "It is best to post weekly, or longer, plans or projects and then have check-ins along the way. This provides for flexibility that students may need if they are not able to put the same amount of time and effort into their work each day." Teacher J found that a specific program helped to teach remotely effectively.

> Edpuzzles are great to give more discipline to complete the work on their own time and at their own pace. Edpuzzles is also a great way to check if the student is really doing the work because they have to answer it individually and cannot share answers with one another.

Programs like EdPuzzle have helped students to complete assignments with integrity as well as providing that bridge needed for high school discourse. Yet two teachers acknowledged not knowing the best way to teach remotely because each class varies.

A primary element of remote learning that has affected many students is unequal access to technology, whether it be lack of WiFi or devices. NYC math Teacher L shared,

> I have encountered a student with no access to a computer or Wi-Fi. I have had to send him supplementary work that he can do on his mom's phone. I have also had students who are asking a ton of questions while completing work because they are not looking at any of the videos or notes I am posting.

For most responding teachers, their districts were supportive in getting students the materials they needed to access remote learning. For example, most teachers said their students were supplied with 1:1 Chromebooks or other devices. Teacher Z and Teacher L tailored their class material and availability to help struggling students who do not have family support at home. Teacher Z said,

> I always make the lesson or the work we are doing available for them to do on a phone by sending a pdf version. I have also been very easy going with submitting work on time because I know some of my students have to share their computer with siblings or parents who are working from home.

"I have had 1:1 google meets with students who need extra help. I think that this crisis is going to explode the achievement gap," said Teacher L. "Students whose parents are able to homeschool and help with assignments will fare far better." Teacher M also reflected on the support that students get or lack thereof: "Participation can be better on some assignments than others. Also, it's apparent some students have parent support, while others seem to be on their own."

Teachers shared many thoughts about their experiences with declining participation levels of students during remote learning compared to their participation when learning in the physical classroom. Teachers remarked that frequent parent communication was involved to check on the well-being of students and ensure that they were completing work. Teacher D added, "We constantly call and text and email to check in on the inactive students to make sure everything is okay." When teachers did not see students completing assignments, they tried to intervene and contact home. Some teachers made contact as a grade level team or individually. Some teachers relied on guidance counselors to contact students who were not active during remote learning. These teachers reported that about 50% of students actively participated. "Sure, there are some students that do the bare minimum," said Teacher M, "but nine times out of ten, they are the same students that did the bare minimum when school was in session."

In addition to low participation, teachers faced several other challenges during remote teaching. Teacher J expressed frustration with many aspects: "Having the kids complete the work, kids not responding to emails, kids not showing up to Google Meets, kids writing inappropriate ideas in the chat, kids not shutting off their microphones, and kids not willing to turn their cameras on." The lack of effort and apathy that students displayed during remote learning was concerning and frustrating for many teachers. Perhaps social media is to blame for this as quarantine and time off from school has been dubbed "corona-cation" by many middle school aged students. Teacher D commented on this vacation aspect as well: "Many students feel they are on an extended vacation and are not putting any effort forward in their studies. Many students have logged in to google classroom just to leave a comment that says, 'I don't get it.'"

During remote learning, most teachers remarked that students who were self-motivated fared better than other students who did not have initiative or support at home. When updated and informed, parents were appreciative to hear from teachers about their child's progress. According to Teacher K, "The feedback that I have personally received is very positive. However, that is not to say that parents are not overwhelmed by the situation in general." With this unique situation of uncertainties and remote learning, the students may long for the good times in a physical classroom. Teacher L reflected, "They were quick to adapt to online learning, but their participation and motivation has slowed down since the beginning. I think they all want to go back to school."

Social and Emotional Effects on Learning

Teachers are required not only to teach the approved curriculum, but also they are responsible to establish and promote Social Emotional Learning (SEL) goals and curriculum (CASEL, 2020a; 2020b). While the traditional method of teaching was disrupted, teachers found ways to maintain that social and emotional connection students need apart from the daily routine of Math, Science, Social Studies, English Language Arts (ELA) and other subjects.

Teacher K shared that "the feelings of isolation and loneliness are prevalent right now, but you can still see and hear your classmates [in a synchronous meeting], and teachers help to provide some type of normalcy for our students." Teacher J said,

> Teachers hope students are contacting one another via Google Classroom or via text to help each other with assignments and check in with one another... .Emotionally, this is affecting students because of disruption to their routine. The behaviors of the students have also been impacted, because as teachers we can hover around the classroom to keep an eye on negative behaviors. However, in the online platforms, students are more prone to misbehave and [teachers] can no longer give a consequence.

Teacher D stated, "The process was very rushed and we definitely felt like it was more reactive than proactive. There was no discussion in my school prior to March 17th when we reported to start preparing our Google Classrooms." When teachers experience a lack of training overall to meet the educational needs of their students, they can feel even further stressed to meet appropriately the SEL needs of students as well. However, many teachers got creative. Teacher D stated that, "Once a week the class meets in their google classroom. We just hang out, talk to each other, and disconnect from everything that was/is going on in the time of COVID." To contribute to their needs for the social and emotional aspect in the classroom and to make the online social aspect more interesting, Reading Teacher Z noted that "twice a week we have class meetings and a fun read aloud. Our class has also started a book club so students could get together via Google Meets to discuss the books." Yet Teacher Z also lamented about some of her students: "Some students who have been school phobic or had adjustment issues, this [remote learning] will exacerbate them."

Google classrooms provide multiple methods of engagement. One way for the students to engage and stay more in touch is through the "Stream" component. The Stream allows for notices or brief postings to be sent out and is there for the participants to scroll through at any time to find the information needed. Teacher M stated,

> I encourage the students to use [the Stream] before they ask me any questions. I often post extra credit questions on Fridays that pertain to 80's movie trivia. Students can work together to use the Stream to find the correct answer for extra credit.

This creative and fun use of the Stream for engagement helps to maintain the SEL piece that students are missing; they need to work together in order to obtain the extra credit. Although many teachers have had to be creative in the way they teach the mandated curriculum, these teachers also demonstrate the need to be cognizant of and purposeful in creating ways to enable students' social and emotional development.

Monitoring and Assessment

This pandemic's effect on education was unprecedented and left educators scrambling to figure out how much they should hold students accountable for their assignments. Each student's home life differed from the next, as well as access to the internet and devices to use to complete their remote learning assignments for the fourth quarter. Questions about monitoring and assessment included students' engagement and completion of work and teachers' and districts' ideas about appropriate grading policies.

Ensuring students were engaging was difficult for teachers to do through remote learning. If students were not completing their assignments, teachers reached out to the student and parents if necessary. To engage with students, all seven teachers provided daily or weekly feedback on assignments that students completed. Math teacher L provided an attendance question everyday as a "daily check-in" to ensure student participation, and Social Studies Teacher J also provided an attendance sheet to be completed during each Google Meet to see which students were absent. All teachers accepted late work from students without penalty. Yet districts' and schools' grading policy differed. Five of the seven schools used a pass/fail grading policy focusing on student effort and completion of work while only two used a four-level grading policy. These teachers used a relaxed grading policy with their students because this event was unprecedented, teachers and students were mostly unprepared, and each student's circumstances differed.

ICT Math Teacher D stated that they graded students based on effort in their work because "these are unprecedented times and we cannot expect children to cope well with these uncertain times." Fifth grade Teacher K's district decided to continue the use of their normal 1-5 grading policy. She disagreed with her district's decision not to convert to a pass/fail grading policy for the fourth quarter because of the "amount of inequity present." Each student's circumstances, support system, and guidance differs so she chose to grade her students based on making "contact with all of [her] students each day; that is the most important thing at this time." Expressing agreement, Math teacher L also graded her students' assignments based on the amount of effort and completion of their assignments as pass/fail. Teacher M's Suffolk County district gave a pass/fail grading policy for the third quarter, and for the fourth quarter teachers were to combine the two highest marking period grades. Art Teacher R graded based only on giving feedback to students. Reading Teacher Z's and Social Studies Teacher J's districts gave them a four possible grading system to grade assignments. Teacher Z's district grading scale was composed of grades 100, 85, 70 and 59 while Teacher J's district grading scale was composed of grades 100, 85, 65, and 0 for assignments.

Looking Forward

When our teachers looked forward to how COVID-19 will affect the future of teaching, they also discussed which programs or applications, if any, they will continue to use as they plan curriculum and

teach in the classroom in future years. They also addressed the impact of this remote teaching change on the role of teachers, teacher retirement, and teacher attrition.

Six of the seven teachers stated that they will continue to use Google Classroom. They taught different middle school subjects, and other than the almost unanimous answer of using Google Classroom, other programs and applications that they would continue to use in the future varied. They discovered new programs due to COVID-19's forcing remote teaching. Although not all of these programs promote the desired class interaction, they often include photos, videos, or some collaboration which help to engage students and elevate these tools above individual worksheet assignments. Fifth grade teacher K will continue to use her applications like WebEx for webcamming conferences with students, xtraMath, MobyMax, Khan Academy for Math and LightSail for Humanities. Teacher L will continue to use IXL.com for students to practice math skills. Art teacher R will continue to use videos and tutorials in place of lecturing students about art history. English teacher M, who is older, admitted he had a more difficult time through remote learning using Google Classroom and technological resources. As a result, he said he will just continue to use Google Classroom. Teacher J will continue to use EdPuzzles and the historical videos that accompany them. She will continue to create questionnaire quizzes based on the videos using Kahoot. Although remote learning was a difficult task to conquer for both teachers and students, these teachers are happy that out of this chaotic teaching environment, they found some positives in the effective online programs and resources for their subject.

Teachers had mixed responses about remote teaching's lasting effects on teaching and education overall and the effects on budgets and teacher retirements. ICT Teacher D believes, as does Teacher J, that there will be no lasting effect of remote learning on teachers in the future because there is just no substitute for live teaching. Teacher L also believes remote learning will not have any outstanding effects for teachers. Teacher K believes that the effects of the COVID-19 crisis will impact teachers and leave permanent implications for education. English Teacher M pondered,

> Fifty years ago people were afraid robots would take the jobs of Americans and it was reflected in so much of the literature. If you read "The Fun They Had" by Isaac Asimov, the fear of teachers being replaced by computers was a fear decades ago. ... I can say this with absolute certainty: The majority of students have expressed the sadness they have for not being in class. They have gained a respect for the importance of face-to-face teaching.

Art Teacher R stated, "Yes, I do think that older teachers might feel that this would be a good time to retire and leave the technology to the younger staff." Some districts are offering buy-outs to teachers who are close to retirement. They can offer new teachers a smaller salary. New teachers are also more likely to be technologically savvy, to adapt easily to new technological trends/skills, and to integrate them into their lessons. "Teachers will have to adapt to our new normal," stated Teacher Z. "The economic fallout of the pandemic is going to have a huge impact on education."

Discussion and Conclusions

Although teachers identified successes with remote teaching and appreciation of new technology skills and subject-specific programs, they primarily struggled with the chaotic shift to remote teaching. These teachers need and wanted more preparation with the learning management system used, most using Google Classroom, even though they knew the sudden switch to remote teaching allowed scarce time. They demonstrated that no best one way exists when teaching remotely. Yet they shared commonalities that are also consistent with earlier cited research, expressing that guidelines and finding assignments

should be simple and readily available for students and parents, and routines should be established by using a small number of programs. Different teachers suggested posting assignments ahead of time, modeling on video, and letting students work at their own pace. They recognized access inequalities with WiFi and devices, varying family support levels, the need for altering plans, being flexible, and adding extra help time.

One message heard often during the spring of remote learning was that academics can be reviewed and students will catch up. However, social-emotional trauma could be much more difficult to overcome and long lasting, especially if remote learning continues for a long period. Thus, parents were encouraged not to push students too much or worry if homework was not always completed. These teachers understood SEL needs and encouraged synchronous meetings not only for classes but also for students to meet with each other to cooperate on assignments or just to hang out and talk. Internalized behaviors such as sadness and anxiety from isolation and quarantine are serious concerns to address. Yet all the middle school structures and programs such as teaming, advisories, and bullying programs cannot be replicated in the typical meaningful ways with a Google meet or WebEx meeting. These teachers lamented lower levels of student participation and engagement, and they employed attendance check-ins, online activities, and numerous means to stay in contact with students and parents, recognizing that continual communication helps both academic and SEL needs. When students do not participate, turning off their webcams or audio, they are disengaging their minds and feelings.

Dave Brown (2020) recently wrote, "Middle level educators can tap into the natural and advanced curiosity of young adolescents, but only through explicitly planned listening. Purposeful, responsive listening has value when teachers elicit students' questions, concerns, and ideas to transform their classrooms into learning meccas" (p. xii). We fear these student-centered goals, so essential in engaging increasingly independent, curious, and active middle schoolers may be subdued in remote learning. Furthermore, how will students continue to learn the goals of respecting, accepting, and getting along with others who look or act differently when they lack opportunities to socialize with others in schools and in real life. Will they learn empathy for others or have chances to build their own character, self-confidence, and good citizenship? An important finding from this remote learning study is that teachers need to make time to communicate with and support their students, ideally every day. Checking on each other's well-being and offering support to students and parents alike is paramount. Every student wants to feel supported during this pandemic, and teachers are at the core of achieving this goal.

> We should remember, when things go back to normal, people will not remember the educational content delivered, but they will remember how they felt, how we cared for them, and how we supported them. We have to further remember that care is a basic characteristic of human life, and that all people want to be cared for. (Bozkurt & Sharma, 2020, p. iii)

These teachers expressed that the level of parental support at home will affect student success with remote learning. Parental support effects the achievement gap in normal schooling environments, and some schools try to lessen this gap by limiting homework and focusing on common learning standards while students are in school each day. Remote learning can increase this achievement gap where parents are relied upon to provide even more time, resources, and support for their children. Although a couple of teachers noted their one-on-one extra help meetings with some students, their time for these meetings will certainly be limited and probably will not be enough to make much difference, especially if multiple students in high needs schools require help. Teachers noted their efforts to lessen grading concerns by providing regular feedback on students' work, accepting late work, and most giving quarterly pass/fail grades.

If middle schoolers are effectively supported both academically and social-emotionally, self-

regulated learning (SRL) could be promoted as students are growing more independent, accountable, able to think abstractly and critically, and able to do more independent and individualized learning (Ardito, 2020; Denis & Neitsel, 2011). Remote learning would seem to complement these ideas as gifted students or those already familiar with the topic could do more asynchronous or extended work on their own. Yet students have differing learning styles and teachers must know these and determine which best practices support their students for SRL to be effective. Furthermore, a strong foundation of SEL must be in place among students for them to be able to move forward with individualized learning or especially personalized learning that promotes the active role of students in helping to design their curriculum (Bray & McClaskey, 2015). The New York State Education Department (2019) may need to rethink or delay their commitments and wide-spread implementation of personalized learning plans.

As several teachers agreed, the effects of COVID-19 leading to mass remote learning across the world will likely have lasting implications on education. Part of the enduring effects of remote learning, as teachers noted, will be the increased knowledge and access to learning management systems such as Google Classroom and effective programs for specific subjects.

Although expectations for responding to the pandemic are constantly changing, for the current 2020-2021 school year, COVID-19 has caused many school districts in the US to continue online learning, while others are practicing a hybrid model, and fewer schools have allowed students a full-time return to classes. Even in the traditional class setting, more districts have implemented 1:1 devices in their classes. Teachers realized that older teachers less savvy with technology might retire sooner; however, these teachers do not believe remote learning can replace what students gain academically and affectively from live teaching; several teachers emphasized that students want to return to school.

With more technology infrastructure and knowledge in schools and districts, educators have a deeper foundation on which to make decisions and more flexibility to continue learning away from the physical school building. The goal is for districts to expand their policies, guidelines, expectations, and grading plans to include remote learning realities, both positive and negative. Teachers must continue to be flexible with plans in place to accommodate new remote learning situations and implications. Thus, continual professional development with learning management systems, programs, and devices is warranted for all teachers. With growing confidence, teachers can take initiative, explore new resources, and plan effective engagement for their teaching and fostering of SEL whether the teaching is in the physical classroom, a hybrid format, or totally remote.

Declaration of Conflicting Interests

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Appendix 1

Thank you for completing this survey on "Remote Teaching and Learning in MiddleSchool." Your responses will help our whole class better understand your experiences.

Preparation
1. How did your district and/or school administration help to prepare you for remote teaching?
2. How satisfactory was this preparation, and for what did you wish you were more prepared?

Teaching, Learning, and Participation
3. Based on your experiences, what is the most effective way to teach remotely?
4. What challenges have you encountered with remote learning?
5. What are your students' participation levels and if not participating, how do you promote and gain more participation?
6. What feedback have you received from students and parents and were students quick or slow to adapt to remote learning?
7. How do you assist students who have unequal access to remote learning?

Social and Emotional Effects on Students

8. How do you make connections with students online and help them to connect with each other?
9. What impacts do you think remote learning has had on the emotional, social, and personal needs and behavior of students?

Monitoring and Assessment

10. How are you monitoring student work and engagement and ensure that students are completing work?
11. What do you think are the most appropriate grading policies for remote learning, and what policies has your school and/or district decided on?

Looking Forward

12. Which programs or applications, if any, will you continue to use as you plan and teach in the classroom in future years?
13. Do you think remote learning will impact the role of teachers, teacher retirement, and teacher attrition? Why or why not?

Thank you so much for taking the time to reflect on these important issues. If there are other ideas you would like to express about your remote teaching and learning experiences, please include them here.

[i] Other MCAC candidates contributing to this research included Jake Kamelhar, Lauren Kanfer, Robert Roma, and Mary Andriotis.