

THE EFFECTS OF REMOTE LEARNING ON STUDENTS IN AN URBAN SCHOOL
DISTRICT

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Abstract

Remote learning is a new concept to our entire country. Does the equity and accessibility in a school district play a role in academic performance for students through remote learning? For this study, I am going to be surveying teachers on how they perceive student performance levels during and after remote learning. Typically, it is the in-person teaching that has the greatest effect on students to increase their academic performance in content area subjects. With COVID-19 prohibiting in-person instruction, schools were forced to transition into remote instruction for their students. With this study, I am going to ask teachers a series of questions on how remote teaching went for them as well as their students in the spring of 2020. Once school restarts in the fall of 2020, I will re-conduct the interviews to see how remote learning affected students' performance levels. I hypothesize that if schools remain online, academic performance levels will continue to decrease, and if schools reopen to in-person instruction, students will be at the equivalent, or lower academic performance levels as they were when schools originally transitioned to remote learning. This study will be conducted in grades 1, 3, and 5. In grades 1, it may be hard to gauge their academic performance levels because their brains are at a very young developmental age and it may be harder to retain information, however in grades 3 and 5 their retention rate is higher and they should be apt to recall more information.

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Chapter 1

Introduction to COVID-19

In January of the year 2020, a new coronavirus was detected for the first time in the United States, a month of following the virus from its origin point of Wuhan China (Evidence). In the early days of December 2019, some customers who had been shopping at a wholesale food market began experiencing symptoms of pneumonia. When a large number of people began getting sick, the World Health Organization began an investigation where it was discovered that victims were instead infected SARS-CoV-2. SARS-CoV-2 is a coronavirus that was renamed COVID – 19 for short (Coronavirus disease 2019). Similarly, to the SARS outbreak in 2003, the coronavirus was detected in bats – a top selling product at the market in Wuhan where COVID-19 was first detected. COVID-19 presents itself through symptoms such as a fever, dry cough, loss of taste or smell, as well as a sore throat, and is most dangerous to those with pre-existing health conditions or the elderly population (Coronavirus n.d.). Due to the rapid spread of COVID – 19, many travel restrictions were put in place, with many countries closing their borders. Workplaces, schools, and social gatherings were all moved completely remote or “virtual” by the end of March in 2020, in an effort to reduce and minimize any face-to-face contact. For those deemed “essential” such as hospital staff, grocery store employees, and gas stations, masks were required and sanitizing efforts were at an all-time high (Public health resources).

Chapter 2

What is Remote Learning?

Remote learning quickly became a phrase used by millions of people worldwide amid the start and spread of COVID-19. However, there is one question surrounding this new phrase as a society norm; what is remote learning? The concept of learning through an online platform or through means other than an in-person classroom is actually not a new idea. Prior to remote learning, there was distance learning; which started in the 1800s as “correspondence education” (Kentnor). Correspondence education was the first form of education offered that did not require face-to-face meetings in a classroom setting and is defined as a “method of providing education for nonresident students, primarily adults, who receive lessons and exercise through the mails or some other device and, upon completion, return them for analysis, criticism, and grading,” (Correspondence Education).

Through the years, correspondence education, like most things evolved with technological advancements and inventions. Radio and television became a means of delivery for educational content, with universities broadcasting educational matter to thousands of people (Kentnor). It is no surprise that with more advances being made and the invention of the Internet, came the first entirely online based education program for students to get their Bachelor’s and Master’s Degree (The history of online schooling). This program was developed through The University of Phoenix and is still in place today as one of the largest online degree programs for higher education. Today, online programs not only flourish as higher education programs in college institutions, but in high school with programs such as VLACS – the Virtual Learning Academy Charter School, and even offer online options for students as young as kindergarten through K-12 Schools.

Through distance learning, educational material was able to be delivered, presented, and collected through many means of delivery. Distance learning set the stage for means of delivery outside of the classroom, something that would soon be introduced as remote learning. Remote learning is different from online programs and institutions because they are designed to mimic an in-person classroom environment

and standards. “Remote learning provides an opportunity for students and teachers to remain connected and engaged with the content while working from their homes... typically linked to emergency situations that pose a threat to student safety,” (Teach & Learning). Additionally, unlike online programs and institutions, remote learning does not follow its own specialized curriculum for online delivery. In fact, “many of the requirements in a traditional classroom environment will also play for remote learning, and the goal is to adhere to as many state and local requirements as possible,” (Teach & Learning). In simple terms, remote learning is essentially delivering the face-to-face classroom curriculum to students in their own homes or environments through online platforms to maintain delivery of instruction during prolonged periods.

Chapter 3

Methodology and Demographics of Population

When determining the methodology for this research, the two things that were the main focus were grade and demographics. Factors in determining which school would be best to conduct research based off of demographics include the percentage of students who had limited English proficiency, free or reduced lunch, as well as race. This information was provided by the New Hampshire Department of Education's 2016/2017 school year data collection (NH School and District Profiles). These factors played a role in the decision because they affect accessibility to devices, accessibility to curriculum, language, as well as environment for the students involved.

Table 1A highlights the percentages based on the school population of 420 students at Highland and shows where Highland Goffes-Falls is in ranks among the fourteen elementary schools in the Manchester School District. Whereas Table 1B and 1C show all fourteen elementary schools for a whole demographic comparison of free/reduced lunch, English proficiency, as well as race to provide a snapshot of the Manchester School District. In terms of racial diversity, Highland fell among the five lowest schools for races that were not White or American Indian. Out of the fourteen elementary schools, Highland had the second highest White population, and highest population of American Indian or Alaskan Native students. Ultimately, the determining factor in selecting Highland Goffes-Falls was that it fell in the middle for rank in English proficiency among students. While race and other demographics can affect environmental factors as well as accessibility factors for students, language is across all aspects of education; from curriculum to materials, as well as technological aspects such as Zoom, Google Meets, and platforms such as Seesaw and iReady. According to the Educational Development Center, the ability for teachers to scaffold supports for English Language Learners can be challenging to do in a "large, online classroom environment," (How is the pandemic affecting English learners?). With Highland Goffes-Falls falling exactly in the middle among the fourteen elementary schools, this was the most prominent factor in deciding to select Highland Goffes-Falls as the school to conduct research because it encompassed a non-

biased population of Additionally, language encompasses demographics of race, and socioeconomic status due to its overarching demand for access in our everyday lives.

Table 1A – 2016/2017 Demographics at Highland Goffes-Falls							
<i>Limited English Proficiency</i>	<i>Free/Reduced Lunch</i>	<i>American Indian or Alaskan Native</i>	<i>Asian or Pacific Islander</i>	<i>Hispanic</i>	<i>Black</i>	<i>White</i>	<i>Multi-Race</i>
11.9%	44.2%	1%	2.6%	14.8%	5.5%	72.6%	3.6%
7 th lowest out of 14	2 nd lowest out of 14	Highest out of 14	2 nd lowest out of 14	4 th lowest out of 14	4 th lowest out of 14	2 nd highest out of 14	4 th lowest out of 14

Table 1B – 2016/2017 Manchester School District Elementary School Language and Free/Reduced Lunch Populations		
<i>School</i>	<i>Limited English Proficient</i>	<i>Free/Reduced Lunch</i>
Bakersville School	25%	82%
Beech Street School	30.8%	93.1%
Gossler Park School	6.5%	81.9%
Green Acres School	4%	25.9%
Hallsville School	10.5%	63.3%
Highland Goffes-Falls	11.9%	44.2%
Jewett School	8.2%	53.5%
McDonough School	8.9%	77.5%
Northwest Elementary School	16.9%	64.6%
Parker-Varney School	7.4%	69.9%
Smyth Road School	4.5%	41.2%
Webster School	14%	49.2%
Weston School	13.7%	50.7%
Wilson School	29.1%	89.2%

Table 1C – 2016/2017 Manchester School District Elementary School Nationality Demographic Populations						
<i>School</i>	<i>American Indian or Alaskan Native</i>	<i>Asian or Pacific Islander</i>	<i>Hispanic</i>	<i>Black</i>	<i>White</i>	<i>Multi-Race</i>
Bakersville School	0.3%	5.1%	34.2%	19.9%	36.5%	4.1%
Beech Street School	0.3%	6.1%	45.2%	15.3%	29.7%	3.4%
Gossler Park School	0.2%	5.8%	22.9%	6%	64.3%	10.7%
Green Acres School	0.2%	6.3%	8.1%	1.8%	79%	4.6%
Hallsville School	N/A	5.6%	19.6%	3.9%	66%	4.9%
Highland Goffes-Falls	1%	2.6%	14.8%	5.5%	72.6%	3.6%

Jewett School	N/A	10%	23.2%	5.8%	59.1%	2%
McDonough School	0.2%	1.8%	25.8%	8%	54.4%	9.8%
Northwest School	N/A	6.2%	19.7%	8.9%	59.8%	5.5%
Parker-Varney School	N/A	6.2	24.2%	7.4%	56.4%	5.8%
Smyth Road School	N/A	3.2%	14.6%	4.5%	69.3%	8.4%
Webster School	0.4%	4.3%	18.8%	9.5%	62.5%	4.5%
Weston School	N/A	5.5%	12.7%	11.9%	65.8%	4.1%
Wilson School	N/A	4.9%	44.7%	9.1%	38%	3.3%

Grade was the second focus in the methodology for conducting this research. Highland Goffes-Falls is a kindergarten through fifth grade school. Through determining what grades to focus this study on, key factors such as developmental stages, academic readiness, and influence on environment. It is estimated that 56% of children in America are faced with challenges in either social, cognitive, attention, or self-regulating skill (How is the pandemic affecting English learners?). Based on developmental rates, the focused grades for this study were chosen to be first, third, and fifth. First grade is when most students will be at an appropriate developmental place both cognitively and academically, and students leave Highland after fifth grade. Third grade was put into the mix because it was in the middle of first and fifth and was a good checkpoint to check student degree of progress and growth. One important note is that in the fifth-grade representation, there was a fourth-grade teacher and a fifth-grade teacher instead of two fifth-grade teachers. This also happened with third-grade; there was a third-grade teacher and a second-grade teacher. This discrepancy was due to a lack of access to teachers due to the weight of the pandemic and changes in teaching that teachers were faced with.

Once grade and school were selected in the determination of conducting interviews, the first phase of questions were conducted after the spring of 2020 and were composed into eight categories; Teaching Background, Remote Teaching and Technology Usage Background, Remote Learning Access, Remote Teaching in Action, Grading and Assessment, Remote Instruction Communication, Barriers and Accomplishments, and Post-Remote Instruction. *Teaching Background Information* focused on each teacher's background in the district and grade that they currently taught in during the time of this interview.

Remote Teaching and Technology Usage Background centered in on any previous trainings or professional development teachers had received with integrating technology into the classroom with certain platforms, and their personal experience with integrating technology or teaching remotely. *Remote Learning Access* gave insight into how many students in each class were able to have access to a device on their own, how many received a device that was provided by the school/district, as well as attendance and engagement of students during the remote period, and if there was a connection with attendance and access to a device. *Remote Teaching in Action* examined at what each teacher did for instruction during remote teaching – their schedules, subjects taught, and platforms used. *Grading and Assessment* focused on how students completed and handed in work, the types of feedback provided (if any), district and school policies regarding grading, and support services for students. *Remote Instruction Communication* centered around the teacher-student and teacher-parent communication during the transition to remote learning. This not only focused on the frequency and content of communication, but the platforms and means of communication teachers used as well. *Barriers and Accomplishments* focused on technological, professional, and personal barriers that teachers were faced. Lastly, *Post-Remote Instruction* asked teachers about their thoughts moving forward for the fall of 2020; the model schools would be using, training provided, as well as predictions that remote learning would have on student academic performance levels.

Once the first round of interviews had been conducted, I waited until the first half of the year was done for the Manchester schools. This allowed for four months to go by and allow for teachers to adequately measure their students' academic performance levels and understand them as a learner. The second round of interview questions looked similar to the first round, with a deeper dive into specific subjects into students' academic performance levels. Round two of interview questions were categorized into the following: Fall of 2020, Remote Learning Access, Grading and Assessment, Remote Instruction Communication, Barriers and Accomplishments, Student Academic Performances, and Moving Forward. The categories that remained the same had the same description – with updates that teachers may have made in regard to recommendations by the school, district, or peers, as well as personal preference or

learned ability. *Fall of 2020* focused on teacher's experiences during the first four months back in school – the model the school used, trainings, as well as what instruction looked like. *Student Academic Performance Levels* examined students' academic performance levels in the subjects of reading, writing, math, science/social studies, as well as their social/emotional levels. Finally, *Moving Forward* focused on teacher's concerns for the remainder of the school year and beyond – the lasting effects of remote learning on students' academic performance levels and social/emotional well-being.

Chapter 4

Phase 1 Interview Trends

Table 2: Teacher/Class Information			
Teacher	Grade Taught	Number of Students in Class Spring 2020	Number of Students in Class Fall 2020
Teacher 1	1 st	22	20
Teacher 2	1 st	25	23
Teacher 3	2 nd	22	25
Teacher 4	3 rd	20	20
Teacher 5	4 th	22	24
Teacher 6	5 th	22	21

Table 2 shows the grade each classroom teacher taught and the number of students in their class for the spring of 2020 and fall of 2020.

Student Access and Engagement

Student engagement and access played a role in students' ability to access their curriculum and act in their education during the remote period in the spring of 2020. Table 3A shows the grade and classroom breakdown of students who required devices from the district to access remote instruction, as well as the number of students who were consistently attending remote instruction.

Table 3A – Student Accessibility and Engagement in Spring 2020			
Teacher	Students Who Required Devices	Sample Grade Percentage	Students Actively Present
Teacher 1	20/22 Students	48.9%	18/22 Students
Teacher 2	3/25 Students		16/25 Students After April
Teacher 3	11/22 Students	35.7%	4-5/22 Students
Teacher 4	4/20 Students		4/20 Students
Teacher 5	0/22 Students	20.5%	19/22 Students
Teacher 6	9/22 Students		21/22 Students

First-grade students had the highest population of students who needed devices that were provided by the Manchester School District. One important note is that Teacher 1 lost 4 students during the transition to remote instruction, and two of those students were issued Chromebooks from the district. This was a common trend among all grades and teachers that showed although students were provided with the physical means of technology to participate and access their education from a remote setting, their homes may not have been equipped or provided a suitable environment for remote learning. Through interviews with the teachers, it was a common theme that students were not as engaged in their education. For teachers who mirrored their in-person classroom schedule, they found that students would show up for certain subjects but not others – as reflected in Table 3A under the Students Actively Present column.

Teacher Barriers

Teachers were asked about personal, professional, and technological barriers that they were faced with when switching to remote instruction in the spring of 2020. Personal barriers among all teachers included family struggles, time management, physical health, and mental health. In terms of time-management, teachers were now working more than ever to not only prepare lessons for students, but figuring out how they were going to deliver that content. One of the greatest barriers that teachers faced personally was maintaining family relationships and management. Teacher 6 was a foster parent at the time of the transition in March 2020, and needed to keep their family engaged, as well as staying on top of their foster child and own child about their grades to make sure they were not slipping during this time where it was easy for them to without in-person accountability. Additionally, Teacher 3 had a child in fourth grade and a three-year-old, and said “They were all home and I was trying to keep them entertained while helping my fourth grader with their school work.” With the stress of this new added pressure, teachers commented on their mental health degrading with anxiety and depression which resulted in their physical health declining from lack of time and motivation for physical activity or preparing healthy meals.

Professional barriers for staff included inconsistency of information from the school and district in regards to what they could or could not use for remote platforms to deliver instruction, communicate with students/parents, and collect student work. Additionally, all staff had not been provided with adequate training not only on delivering remote instruction, but using online platforms. Teachers 1, 2, 4, and 5 had integrated some technology into their classroom such as Mystery Science, YouTube, Google Docs, Seesaw, and iReady which were able to translate into remote instruction. Unfortunately, due to the unexpectedness of COVID-19 causing nation-wide quarantines and forcing a transition to a remote world, no one could be fully prepared for the drastic change that had been taken place.

Lastly, technological barriers were a pressing barrier that teachers were faced with. From student Wi-Fi connections to their own, Teacher 4 stated that often times they were being kicked out of their own meetings and would need to join from their phone. Growing off of connectivity issues, Teacher 6 stated how some of the Chromebooks that had been issued to her as well as students did not hold the capacity to host meetings. With technological barriers not going away, students were limited to access their curriculum due to factors beyond their control, unfortunately resulting in some students giving up and no longer bothering with trying to join class.

Concerns for the Fall of 2020

At the end of the interview, teachers were asked about their concerns moving forward with how instruction would look in the fall, as well as the impact this would have on students in the future with academic performance levels and what to expect. Among all responses, the most common included losing connections with students, not being prepared for whatever model the district opted to use. Additionally, among the concerns were thoughts about how the fall would look and fears of not returning to in-person and switching to live lessons that are broadcast through a platform such as Zoom or Google Meets. If schools did go back, teachers were concerned if there would be enough equipment for adequate cleaning and safe-keeping of the schools on a daily basis.

Student's academic performance levels were a high priority concern for all teachers, with all six agreeing that student's academic performance levels were going to be negatively impacted by the remote instruction. Teachers predicted that the students who were already performing at a higher level than grade level expectations will remain at a higher level, and the students who are currently performing below grade level expectations will only continue to fall greater behind. With much of the last couple of months' contents lost through translation of remote instruction, many students will be going into the next grade level without the knowledge they need to be successful and will be testing below grade level expectations. A concern of teachers was that students will always be behind and there will be a deficit that is present for years to come in this generation of students.

Chapter 5

Phase 2 Interview Trends

After the first four months of school, the second round of interview questions were conducted with the same teachers. In this section, student access and engagement, teacher barriers, students' academic performance levels, and concerns moving forward are addressed.

Student Access and Engagement

Table 3B shows the results for students who required devices from the district, sample grade percentages of students who needed assistance, and the number of students who were actively engaged and present for instruction. Manchester School District had been fully remote before attempting a hybrid model that could only be maintained if COVID-19 numbers in the surrounding areas were low for two weeks in a row. This meant that students and staff were switching between fully remote instruction and a hybrid model quite frequently before switching back to remote instruction the week before Thanksgiving.

Table 3B – Student Accessibility and Engagement in Fall 2020			
Teacher	Students Who Required Devices	Sample Grade Percentage	Students Actively Present
Teacher 1	20/20 Students	62.8%	19/20 Students
Teacher 2	7/23 Students		20/23 Students
Teacher 3	12/25 Students	44.4%	24/25 Students
Teacher 4	8/20 Students		17/20 Students

Teacher 5	14/24 Students	64.4%	24/24 Students
Teacher 6	15/21 Students		21/21 Students

Looking at the attendance trends in the fall of 2020 when students were primarily remote before briefly returning to a hybrid model, students in first and third grade were mainly always present, and fifth grade was all always present. According to teachers, the change in attendance from the spring to the fall resulted from students having had the experience of remote learning. Additionally, when looking at the number of students who required a device from the district, the numbers were significantly higher in all grades from the spring to the fall. This rise in numbers could be implicated as a result of families reaching out for assistance knowing what the model/school year was going to look like. In the spring of 2020, it was a first for everyone, and families could have implied that they could share one device for multiple siblings, or that a student could use a parent or guardians. However, in the fall, since there was still a remote option for many jobs, parents needed their own devices. With the summer to prepare and better understand remote instruction, the teachers were able to come up with a set plan and schedule as to what the return to school would look like. Teachers were able to get this information out to families ahead of time and they were able to know what each student needed. Additionally, one factor that could have impacted the high rise in need for district provided devices was the financial burden COVID-19 placed in families. With much of the state shutting down, some families were left with furloughed caregivers, or caregivers who could not afford daycare for their remote students and were forced to quit their jobs.

Teacher Barriers

Similarly, to the first round of interview questions, teachers were asked to identify any personal, professional, and professional barriers that they were faced with during remote instruction in the fall of 2020. Personal barriers remained the same, with the exception of financial burdens being added. Teacher 6 had lost their second job as well as both of their tutoring side jobs. Unfortunately, due to the intense amount

of planning that remote teaching was still requiring, and needing to care for their family, they were unable to get a second job that worked with the added layers to their life which caused money to be tight.

Professional barriers also remained the same with a lack of communication from the district – due to the uncertainty of the situation. Because teachers were able to go into their classrooms to teach their live lessons to their remote students, many teachers felt that there was a disconnect of peer dialogue due to each class being so unique. Teachers also faced a professional challenge of having to deliver instruction to their students remotely, as well as all of their special education students who had an Individualized Education Plan (IEP) that were coming in person to receive instruction and support services to attempt to further keep them from falling behind. Lastly, teachers were faced with the challenge of parent involvement in the fall. Having gone through the spring remote learning experience, many parents were shut off from wanting to be engaged in their child's learning and offered little support to the teachers.

In conclusion, technological barriers remained the same for teachers with Wi-Fi connection, although this time it was the school building Wi-Fi being unable to support all teachers logging on to deliver live lessons at once. When students were in the building, often times computer batteries were not lasting the full day which resulted in teachers having to stop their instruction to get a student a new computer and re-log them back in. Lastly, with students being remote, teachers noticed that some students would turn their camera off during live lessons, which made it difficult to know if the students were accessing the content, and were in a safe environment; a thought they never need to worry about when students were in-person in the school building.

Academic Performance Levels

Academic performance levels were analyzed in reading, writing, math, science/social studies, and social/emotional skills. Table 4A-4D show the results by subject comparing the discrepancies and results of academic performance levels at each grade level. Science and social studies were discussed; however, they are not part of the core curriculum that was being implemented every day. Due to inconsistency in delivery of instruction, it will not be reported out in this study.

Table 4A – Reading Academic Performance Levels by Grade			
Grade	Students on or above grade level expectations	Students below grade level expectations	Areas of weakness
1 st	15%	85%	<ul style="list-style-type: none"> • Comprehension • Letter sounds • Sight words
1 st	25%	75%	<ul style="list-style-type: none"> • Sight words • Reading strategies • Alphabetic principle
2 nd	40%	60%	<ul style="list-style-type: none"> • Comprehension
3 rd	50%	50%	<ul style="list-style-type: none"> • Fluency • Vocabulary • Comprehension
4 th	48%	52%	<ul style="list-style-type: none"> • Vocabulary
5 th	30%	70%	<ul style="list-style-type: none"> • Comprehension

With the exception of third grade, it was evident that the majority of students in the classes of the teachers interviewed were performing below the grade level expectations. In first grade, there was a lack of alphabetic principle, which is the ability to identify letter-sound correspondence, as well as sight word recognition. Sight words are the most frequent words that students should be able to read at their current grade level and are set by the school district expectations. Second through fifth grade had one commonality of a weakness in reading comprehension. Comprehension is a student's ability to understand the text that they are reading and be able to discuss, expand, and question a grade-level text. It is important to note that in third and fourth grade, vocabulary was also an area of weakness for students. Vocabulary and comprehension can go hand-in-hand because if a student is unable to read a text, they will struggle to go back and discuss it after. Additionally, if a student is struggling to identify the words in the text, they are unable to comprehend and process what the content of the story is about.

Table 4B – Writing Academic Performance Levels by Grade
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Grade	Students on or above grade level expectations	Students below grade level expectations	Areas of weakness
1 st	20%	80%	<ul style="list-style-type: none"> • Spelling • Grammar • English Language
2 nd / 3 rd	25%	75%	<ul style="list-style-type: none"> • Grammar • Mechanics • Peer Feedback • Editing • Length
4 th / 5 th	30%	70%	<ul style="list-style-type: none"> • Length • Spelling • Editing Process • Punctuation • Capitalization

Table 4B discusses students' academic performance levels in writing, based on the grade level expectations about what a student should be able to do in their current grade level. One trend across all grade levels was writing mechanics such as punctuation, capitalization, and spelling. Teachers three and five noted that because students were accessing their curriculum through devices such as laptops and tablets, they were no longer writing on paper and all assignments were being typed and handed in digitally. Because of this transition, students were relying on spell check to edit their papers for them. This also prevented students from engaging in peer to peer editing and exchanging feedback as a part of the writing process. Finally, one last area of weakness for students was content and length of their writing. Teacher 5 noted that students were struggling to write more than two sentences and are stuck being unable to access and express deeper thinking and ideas in their writing.

Table 4C – Math Academic Performance Level by Grade			
Grade	Students on or above grade level expectations	Students below grade level expectations	Areas of weakness

1 st	65%	35%	<ul style="list-style-type: none"> • Basic math facts
2 nd / 3 rd	72%	28%	<ul style="list-style-type: none"> • Math facts • Multiplication • Division
4 th	25%	75%	<ul style="list-style-type: none"> • Geometry
5 th	60%	40%	<ul style="list-style-type: none"> • Students are strong with multiplication and operations

Table 4C examined students' math academic performance levels based on the grade level expectations set by the Manchester School District. Math was the highest performing subject for students. With the exception of first and second grade, math facts were a strong suit for students - especially in the area of multiplication and division. Because there is a weakness in first and second grade, this is due to the change to remote learning in the spring of 2020 because this is a time where these skills are finalized and really put into implementation and higher-order thinking questions.

External Factors in Academic Performance Levels

Teachers were asked about students' social/emotional health and the how that may have played a role in their academic performance levels. After interviewing all six teachers, the main factors of mental health included suicide attempts, anxiety and depression, as well as behavioral outbursts that otherwise wouldn't be seen in the classroom. Additionally, students home life impacted students' abilities to have in-person interaction and continue to have social growth with peers. A last factor that was noted by teachers was the implications of home life on students' education. Home life has always played a role in students' education, being the place, they do their homework, have extra help, and gain skills to help them excel in school. What a student's home environment is has always played a role in how successful they are and the

access they have to outside education. However, now more than ever, a student's home plays a role in their education because it has ultimately become their classroom.

According to some teachers, students are the primary caretaker of their younger siblings due to parents having to work during the day, or parents who are addicted to drugs. For students with younger siblings, they are no longer able to put their education first – watching their younger siblings and making sure that they are getting into their live lessons and have what they need to be successful before they check it themselves. Additionally, some students' home environment may not be best fit for students to learn; parents who are suffering from addiction, mental health diagnoses, as well as poverty. When a student is in a classroom, it is a safe, sterile environment for them to learn in. It is controlled, and there is adult supervision at all times to ensure student success. When you remove the school building as the child's learning environment, you lose all of the stability of that environment, and add many unknowns into the equation. Almost all teachers noted that a student's home environment played a critical role in their success and accessibility to their education.

Conclusion

In conclusion, the COVID-19 pandemic and change to a remote setting for students in an urban school district, children at the elementary school level have been negatively impacted social emotionally, as well as in their academic performance levels. After interviewing six teachers at an elementary school that is the middle ground for English proficiency in the Manchester School District, teachers have many concerns for moving forward. The greatest concern that was expressed by all six teachers was the deficit that these students are going to face for years to come. These deficits include students constantly being behind of the grade level expectations set forth by the Manchester School District and State of New Hampshire. Unless testing and assessment expectations are changed to meet students where they are at due to the content lost during the pandemic, teachers will always be playing “catch-up” and many students will always be considered behind.

When teachers looked at students’ academic performance levels in reading, writing, and math, there was a clear deficit and weakness in the areas of comprehension, math facts (in the younger grades) and writing mechanics and process. Due to students being switched to remote at the end of March in 2020, many students lost the content that would have been delivered to them in those last crucial months of the school year before they head into summer break. Many students are relying on their devices to assist them in their education, therefore they are not learning the mechanics of writing, and losing touch with the writing process. Additionally, in math, students in fourth and grade struggled as they went into learning about geometry because it was lost in those last few months of school.

Science and social studies were looked at together in terms of student academic performance, however due to inconsistencies in delivery and there not being any district or state assessments for every grade, it was not included in the academic performance level data. Teachers did attempt to do science and social studies, with science being an interest to many students. Teachers 1, 2, and 3 discussed the struggle of doing science because they were unable to get the materials needed to students because they were remote, and they did not expect parents to go out and buy things (if they were fortunate enough to have the financial

means). Because of this, many science and social studies content areas were put to the side and students were not able to have the hands-on experience to help them be successful with manipulatives in understanding content.

Through teachers' observations of social/emotional learning, students were struggling due to the lack of in-person interaction with their peers, and many teacher-student relationships were lost. Students were faced with anxiety and depression from the pressure of remote learning and the uneasiness of not knowing if they would be able to access their class each day. A student's safety net of a physical classroom in a school was taken away from them, and their home became their classroom. For many students this presented challenges of insecurity for turning cameras on, missing or being late to class because of taking care of siblings, and not being able to log on due to connectivity or device accessibility. Overall, the impact of COVID-19 and the methods in which instruction is delivered remotely has had a negative impact on students' mental health and academic performance levels. If changes are going to be made to meet students where they are at with performance levels and expectations set forth for each grade level by the district or state, studies and an in-depth look at where the gaps are with students will need to be assessed and looked at carefully to make adequate new standards.

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