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Uncovering Insights on Remote Learning Through a Critical Discourse Analysis of Tweets at the Start of the Pandemic in the United States

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UNCOVERING INSIGHTS ON REMOTE LEARNING THROUGH A CRITICAL DISCOURSE ANALYSIS OF TWEETS AT THE START OF THE PANDEMIC IN THE UNITED STATES

A Dissertation

by

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ABSTRACT

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This dissertation examines the discourses surrounding remote learning during the initial stages of the COVID-19 pandemic through Twitter conversations. Employing a Critical Discourse Analysis informed by Michel Foucault's theories of discourse and power, this study explores how the pandemic has transformed educational interactions over social media platforms. It particularly focuses on the relationships between language, power, and social structures, highlighting the transformative potentials of remote learning amidst a global crisis.

The research reveals how discourse on Twitter reflects broader societal and cultural dynamics, serving as a microcosm of the shifts within the educational sector. Analysis of Twitter threads, retweets, and mentions uncovers the power dynamics, challenges, and the evolving nature of discourse concerning remote learning. By scrutinizing the dominant and marginal narratives that emerged during the pandemic, this study offers insights into the ways educational practices adapted to unprecedented circumstances, emphasizing the importance of technology in facilitating these changes.

Moreover, this study situates its findings within the broader theoretical frameworks of Foucault's concepts of discourse and Fairclough's principles of Critical Discourse Analysis. It argues that remote learning during the pandemic was not only a logistical shift but also a

discursive transformation in education that could have long-lasting effects on pedagogical practices. The conclusions drawn from this research aim to contribute to the ongoing discussions on educational equity, the digital divide, and the future of learning environments.

DEDICATION

To Myra, the compass of my life, whose love and understanding have been my constant North Star. Told you I'd be done soon.

To Noah Boyle, Caleb Bridges, and Julia Henry – my guiding lights, whose laughter and curiosity remind me of the richness of my life.

To Maria Gabriela Ramirez, the trailblazer of academia in our family, whose achievements light the path I walk, and her beautiful family.

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To Sidney Garfield Nelson, my late grandfather, who planted the seeds of learning and creating in my heart. You are missed. Every day.

To The Wolfpack, whose afternoon planning sessions built a foundation of possibility and a collegial network like no other. Please remember to change your email passwords.

To my colleagues at VMware and my brethren at Republic Lodge #570 AF&AM, whose collaborative spirit, brotherly love, and support have been invaluable throughout this journey.

And lastly, to Winston Robert Bridges, Rocky Balboa Bridges, and the late Gomez Alfredo Bridges who barked at the wall, without whom my story would be incomplete.

This dissertation stands as a testament to all of you, who have been my pillars, my inspiration, and my guiding stars. Your support has been the bedrock of my journey.

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INTRODUCTION

Introduction

Some of us have become familiar with *remote learning* through our experience as new or returning adult learners. I can conveniently use my chosen device to "log into" my Tuesday evening class from any location and access a class where my instructor and peers have done the same. Alongside this collegial gathering, course readings, presentations, discussion groups, and syllabi are a click away and conveniently organized to make their access simple and intuitive. Conversely, some of us became aware of this idea of remote online learning only through our experiences during the COVID-19 pandemic. Those experiences might have included having been part of our school's or our district's shift to online learning as an emergency response to the pandemic or adapting to this same change in our children's teaching and learning environment. In each of these instances, we found ourselves compelled to adopt a new model of education that was necessitated by the physical distancing required by medical and governmental authorities in response to this virus. As a result, we gained insights into the opportunities and difficulties of remote online learning for both students and teachers.

I have collaborated with education customers throughout my nine years working as an End User Computing Solutions Engineer at VMware. My primary focus during that time has been providing students and teachers with learning solutions that allow them to access technology resources from any device. My involvement in the education field extends beyond

my current position, however. I have also worked as a classroom teacher, instructional technologist, and mobile learning leader in school districts in the Rio Grande Valley.

Throughout my time in K-12 education, I embraced the view that technology has the power to revolutionize teaching and learning. I used technology tools as a teacher to engage students and tailor instruction to their needs. In instructional technology roles, I actively assisted educators and administrators in leveraging technology to create effective learning environments. Finally, as a mobile learning leader, I facilitated students' anytime and anywhere access to resources through mobile devices.

The onset of the COVID-19 pandemic highlighted the potential increased value of these technological solutions, though their effectiveness varied widely depending on socioeconomic, geographic, and individual factors. With schools and higher education institutions left with no choice other than to adopt online learning approaches, the relevance of these solutions became more pressing than before. I have had the opportunity to assist institutions in navigating this new terrain and to utilize my expertise to impact this area of education. In this study, I will rely on my educator and edtech consultant background to examine the history, advantages, and difficulties of remote learning during the pandemic.

This dissertation will analyze the discussions surrounding remote learning that emerged on Twitter during the first stages of the COVID-19 pandemic. My research is based on my experience and on the theoretical perspectives I gained from engaging with Michel Foucault's works, particularly his concepts of discourse and power, as presented in *The Archaeology of Knowledge and the Discourse on Language* (1972). In this study, I will use a discourse analysis approach informed by Foucault's (1972) constructs of discourse. This method focuses on understanding the relationships between language and power. Discourse reflects the world as it is

while playing a role in shaping and transforming it. Within Twitter discussions about online learning, I will explore how discourse has actively influenced the power dynamics affecting learners' experiences during the pandemic.

Foucault's (1972) work on discourse suggests that power operates within a framework rather than being possessed by specific individuals or groups. Power is not solely concentrated and exerted on others but is also productive. This study aims to shed light on how power dynamics and sites of generativity and productivity manifest through discussions about learning, how those power relations determine who is speaking, and which discourses become "truth," and which are marginalized or silenced.

Building on this idea, I will employ the principles of Critical Discourse Analysis outlined by Fairclough (2015) to probe deeper into how structures of power and dominance are maintained and resisted through text and media in the backdrop of the pandemic. The goal is to expose the power structures and sites of generativity or productivity within the remote learning discussions on Twitter and uncover how these shape or reflect more significant societal understandings and practices. This analysis will begin to reveal the dominant and subordinate discourses about remote learning that emerged during the start of the COVID-19 pandemic in the U.S. and the social and cultural dynamics at play during this unprecedented time. Beyond that, it is a step toward understanding the transformative power of learning under these conditions to inform a more equitable and responsive teaching and learning environment for the future.

Situating " 'Myself' " Through Personal Reflection

In this study, I will incorporate an element of research that uniquely reflects on the principles of discourse analysis – that of autobiographical insight. I use double brackets around "'myself'" putting Foucault's (1972) notion of discursively constructed subjects in tension with

my personal perspectives. When considering my educational technology and remote learning journey before, during, and since the COVID pandemic, certain challenges for educators, students, and families become apparent. The sudden transition to remote learning highlighted existing problems within our education system but also emphasized how technology can support and potentially hinder education.

Thinking about these experiences invites the exploration of several critical areas. These include the challenges and opportunities that remote learning has brought about and how technology helped and disrupted education during the pandemic. Importantly, it also gives us cause to examine the narratives that emerged and continue to emerge in discussions about learning on platforms like Twitter.

By merging the critical approach of CDA with the autobiographical aspects of my experiences during COVID-19, my goal is to shed light on my encounters along with the broader social and discursive framework. This method will allow me to expose the impact of power and discourse surrounding distance learning amidst a worldwide health crisis. The resulting combination of personal and professional experiences with Critical Discourse Analysis provides a nuanced understanding of how power, communication, and education interacted during these unique and challenging times.

Decentering the Learner

Instead of focusing on individuals as static entities, Foucault (1972) highlights that the subject is created through the power dynamics and sites of generativity or productivity inherent in language and social relations. He challenges the notion of a single source of authority. This "decentering" approach examines how knowledge is produced and sustained by institutions and power structures along with sites of generativity and productivity. An essential aspect of his

"archaeology of knowledge" is this displacement of the human subject, the lack of a defined center of knowledge and authority, and the rejection of a single master narrative concerning identity. Instead, identities, knowledge, and authority are continually reshaped through discourse, and this is particularly relevant to the electronically constructed interfaces in educational technology and the types of interfaces created.

Foucault (1972) explains:

> My discourse, far from determining the locus in which it speaks, is avoiding the ground on which it could find support. It is a discourse about discourses: but it is not trying to find them in a hidden law, a concealed origin that it only remains to free, nor is it trying to establish itself, taking itself as a starting point, the general theory of which they would be the concrete models. It is trying to deploy a dispersion that can never be related to absolute axes of reference; it is trying to operate decentering that leaves no privilege to any centre. (p. 205)

The transition to remote learning during COVID has changed how we think of students as simply recipients of knowledge. Instead, it has brought attention to the individual's power and agency in the learning process. Online learning environments have the potential to allow for multiple diverse perspectives to be shared and for students to actively participate in creating and sharing knowledge, although this potential may not be realized due to variations in access, platform capabilities, student preparedness, and pedagogical approaches. It is important to consider these factors when evaluating the effectiveness of online learning in fostering a collaborative and inclusive educational experience. The potential for anonymity and lack of face-to-face interaction in this type of learning can amplify this decentering of the human subject and act to destabilize the traditional power dynamic and allow new ideas and perspectives to emerge.

Understanding Discourse and Discourse Analysis

During the pandemic, schools and organizations scrambled to face the challenges of remote learning. I followed countless conversations about remote learning and educational approaches during this time. These conversations provided a range of experiences, ideas, and viewpoints but also served as a means for interpreting the time's deeper social, political, and cultural backdrop.

In the scope of this study, discourse goes beyond spoken or written communication; it includes the rules, practices, and power dynamics along with sites of generativity and productivity that help us shape our understanding of the world. It forms the foundation of our norms, identities, and relationships. Discourse is multi-dimensional. It operates in relation to other discourses and is deeply rooted in a time and place influenced by sociocultural factors. It brings about changes and produces effects in the world.

Discourse analysis is used in the social sciences and humanities to uncover the power relations within language but also within sites of discursive production and generativity. The process of discourse analysis I will use begins with identifying discursive statements and structures, then interpreting the underlying meanings and ideologies within discourses. Next, I aim to understand why these conversations exist in their current form and pinpoint the factors contributing to their existence. Finally, I will look at the information critically, evaluating how these conversations impact power relations within the broader scope of society and culture, but also how statements on Twitter pointed to a new discursive productivity and generativity.

Throughout the pandemic, I had the opportunity to witness how language and communication shape our perspectives, identities, and relationships. Taking inspiration from

Foucault's (1972) work, I view discourse as a web of representation where power and knowledge intersect. This perspective has influenced my approach to discourse in this study.

In the present study, discourse is more than tweets, posts, or comments about remote learning – it includes the broader systems behind these conversations. I aim to reveal the power dynamics, along with sites of generativity and productivity, and knowledge structures within the discourses on remote education during the pandemic through a Foucauldian lens. My hope in doing this is to show the conventions governing these discussions, the privileged or marginalized voices, and the emerging dominant and alternative narratives.

Defining Online Learning

As I examine the connection between personal experiences, diverse influences, and power dynamics and sites of generativity or productivity in education during COVID, it is critical to define the specific mode of learning under examination in this study – *online learning*. Throughout my lifetime, the term online learning has occupied several different positions, so it is critical for us to trace define what online learning has been and what it means now.

Online learning has been defined in many ways since we started doing it. Terms such as online, remote, distance, and e-learning have been used to describe this type of learning. Apart from the concept of online learning, additional technologies have emerged that offer technology-enhanced modes of instruction outside traditional classrooms. These include web-based learning, which became popular with increasing internet access and broadband availability, and mobile learning, made possible by smartphones and tablets. More recently, virtual learning that utilizes augmented reality or virtual reality devices has become a viable option.

Miller, Topper, and Richardson (2017) state that distance education is "a way to provide personal, educational, and professional advancement opportunities outside of the traditional

residentially-based college experience" (p. 2). Having begun as correspondence coursework delivered through the postal system, the format of distance education evolved into other media, such as "radio, television, and audio and videocassettes" (p. 2) and later onto the web. Moore et al. (2011) initially defined distance learning in the computer era by saying, "distance education uses emerging media and associated experiences to produce distributed learning opportunities" (p. 130). Another point that Moore makes is that instructional delivery in distance learning is facilitated by an instructor who is in a different place from the learner, "as well as possibly providing the instruction at disparate times" (p. 129).

According to Bates (2014), the inception of teaching and learning using distance technologies can be traced back to 1995, when WebCT, which eventually became Blackboard, was created. This groundbreaking advancement introduced a Learning Management System (LMS) platform that allowed instructors to offer learning materials, facilitate discussions, develop activities, and assign tasks. "The first fully online courses (for credit) started to appear in 1995, some using LMSs, others just loading text as PDFs or slides" (Bates, 2014).

Online learning, however defined, is composed of several core standard components, according to Singh and Thurman (2019). These include technology, time, synonymous terms and overlapping concepts, physical distance, a learning component, and interaction between the learner(s) and the instructor(s). Based on the authors' analysis, they determined that the essential elements in all the definitions were: "use of technology, time element – synchronous or asynchronous, synonymous terms and overlapping concepts" (p. 298) and that "common themes found in most, but not all, definitions are: interactivity examples, related terms, physical distance, and comparison to a traditional classroom" (p. 298).

Applying the components described in Singh and Thurman (2019) to COVID-19, it is easy to understand that the need for physical distance was most important during the pandemic. Physical distancing guidelines such as the shelter-in-place strategies at the beginning of and throughout the pandemic made it necessary to use technology tools to provide instruction for some or all students via remote online education. This distancing requirement affected students, parents, and educators in profound ways.

I witnessed this digital transformation's impact in my experiences working with schools during the pandemic. The physical distance between learners and instructors became a universal reality almost overnight, as the conventional classroom structure was replaced by digital interactions and learning experiences. As an educational technology consultant in a company that provides remote learning technologies, I played an active role in this transition by helping institutions navigate the challenges introduced by this sudden change. My job was to provide technology solutions and advise education customers on integrating those solutions into the teaching and learning process. The intended outcome of the work was to help schools manage synchronous and asynchronous learning, rethink pedagogical strategies, and adapt to this new learning landscape. My experiences working closely with educators, administrators, and technology professionals during this time gave me a unique perspective on the dynamics of online learning. The tools and platforms enabling online learning were not just neutral media of instruction but influenced the nature of the interactions and the learning process.

Initial Guidance on Remote Learning during COVID-19

COVID-19 did not just alter the existing education landscape and present remote learning as a possibility. Instead, it demanded immediate and profound changes to traditional teaching

and learning methods. These changes were evidenced in the guidelines issued by education and health organizations.

Organizations such as the Centers for Disease Control and Prevention, or CDC, issued guidance to help school administrators determine when and how in-person learning should be conducted and when offering alternatives to on-campus learning might be safer and more prudent. Within their considerations for operating schools (CDC, 2020) during COVID-19, the CDC recommended that state and local health organizations guide school administrators to make the best decisions for students based on the risk of spreading the virus. The continuum of risk offered indicates that the lowest risk of the spread came when school was conducted in a virtual-only format. Small in-person classes presented some potential for spreading the disease. Larger classes or in-person-only models posed increasingly more risk.

Similarly, the American Association for School Administrators COVID-19 Recovery Task Force, in its Guiding Principles & Action Steps for Reopening Schools (AASA, 2020), set forth instructions that included establishing "consistent guidelines to address multiple scenarios and contingencies to ensure the health, safety, and well-being of all students and staff" (p. 7). These guidelines included using virtual learning as a primary delivery mechanism for instruction and staggering schedules to limit the number of students present at school at a given time. Additionally, the report called for building a technology infrastructure that would support teaching and learning in a remote model. Other guiding principles contained in the report included "offer ongoing personalized and differentiated professional learning" (AASA. 2020, p. 32) and "embrace a new paradigm for public education" (p. 46).

These guidelines from the CDC (2020) and AASA (2020) were evidenced through many of the schools and districts I supported turning to a remote-only format which they recognized

as the lowest risk medium for the transmission of the virus. This model has continued to varying degrees in many school districts well beyond the pandemic and is used to support learning during other times when being physically present at school may not be possible, such as during periods of inclement weather. Additionally, the emphasis on supporting teachers and students with technology tools at the guidance of the AASA (2020) has caused many districts to make the possibility of remote learning an included contingency when planning for which devices to purchase or where to make software investments.

Framing Equity in Remote Learning

I must address the ever-present issue of equity to talk broadly about education. The start of the pandemic in the U.S. and the resultant transition to remote learning exposed existing inequities within the education system, revealing the socioeconomic digital divide. It is important to remember that not all students have equal access to the necessary technologies and resources for successful online learning.

According to the U.S. Census Bureau (Ryan, 2017), households with lower incomes are less likely to have access to computers and the Internet when compared to those with higher incomes (Ryan, 2017, p. 8), which creates a significant disadvantage for students from low-income families when learning shifts to home environments. Through its Household Pulse Surveys, the Bureau revealed statistics related to this disparity (McElrath, 2020). Among the 80% of households in the U.S. reporting that their children were engaged in some form of distance learning, higher-income homes used online resources more frequently than paper materials from the school. In homes where the household income was less than $50,000, it was reported that 65.8% of students leveraged online resources, and 21.1% said that students used printed material from school. In contrast, twenty percent more students used online resources in

homes with a household income over $100,000, while only 15.3% used printed material provided by the school. The survey also says that lower-income homes may have lower Internet and computer proficiency levels besides these differences.

The AASA (2020) report called out the need for addressing underserved populations in the "Advocate for an equitable technology infrastructure" guideline. The report recommended that districts address gap areas where technology resources or internet connectivity might need to be improved and find innovative solutions. Specifically, the information called for school organizations to partner with local, state, and federal agencies to help address these gaps and to determine how the district would ensure that municipal and regional agencies and organizations continue to support free access to WIFI and Internet services.

According to a study by the American Society of Curriculum Development (Simmons, 2020), the COVID-19 pandemic exacerbated equity issues and challenges related to access to technology resources and online learning. One example cited is that of New York City Public Schools, where deliberation of moving to a distance learning paradigm would have had effects beyond the district's ability to teach and learn. It would have resulted in taking away a safe place for students who are homeless and would have been without food, shelter, and other support when schools closed.

Equity issues are worsened by the lack of tablets and internet service that many students need to succeed with distance education, as many school systems deliver it. Using the example of a student who sold lemonade to purchase her own computer for school, Simmons (2020) states, "We should not have had to wait until a pandemic to provide all children with what they need to thrive as learners in and out of school." The author suggests that we learn from what occurred in our reaction to the COVID pandemic and take opportunities to reflect and reevaluate

how we address these problems in the future. She summarizes that COVID-19 is our equity check and a chance to address every child's needs.

In my experiences working with many schools and districts in the boardroom and the classroom, I had the opportunity to witness the reactions of affluent and impoverished schools to this public health crisis. In the case of the latter, remote learning was much more a challenge than an opportunity; schools' ability to provide more consistent access to participation in online learning was a substantial obstacle for these districts. These experiences have reinforced my understanding of digital equity as not just an abstract concept but a pressing issue that directly impacts students' ability to learn, particularly in online education. The pandemic has further emphasized this, and addressing these inequities must be a central part of the approach to education moving forward.

Enhancing Teacher Preparedness

Building upon these experiences and understanding some of the challenges at play within remote learning, it is also essential to emphasize the need for teacher development within this new pedagogical model. Kim's (2020) exploration of pre-service teacher professional development brings this need to the foreground. It emphasizes that effective online teaching, like its in-person counterpart, hinges on collaboration and communication. These attributes can be fostered through appropriate instructional strategies in teacher education and active online partnerships with schools and families (Kim, 2020, p. 156). Simply put, the essence of good teaching remains constant; what is variable is the determination to support proven instructional strategies in the remote learning world.

As the teaching landscape evolves, so must our approach to preparing educators. Darling-Hammond and Hyler (2020) present a vision for this shift. They describe educators capable of

addressing the social-emotional needs of students, implementing healing-informed practices, and responding flexibly to a combination of distance learning, blended learning, and in-class learning. Key to this preparation is the integration of research-based practices, clinical experiences, and performance assessments in professional development (Darling-Hammond & Hyler, 2020, p.2). Such an approach equips teachers for the online learning paradigm and enables them to adapt to future uncertainties.

In my experience, the COVID-19 pandemic sparked a thoughtful strengthening of teacher learning across the professional lifecycle. The ability to help educators adapt, deploy technology effectively, and engage students across digital divides has been pivotal in my work. By preparing our teachers for the evolving needs of the learning environment, we can build a foundation for more resilient educational practices in the future.

A Glimpse into the Pandemic Experience of a Student

In Marstaller's (2020) research, we glimpse the academic journey of two recent immigrants from Tanzania who attended a charter school in Utah primarily meant for immigrants and refugees. The study focuses on Elizabeth, a nineteen-year-old senior who navigated through each day with determination and resilience. Elizabeth was a guiding figure for her siblings, balancing her own studies while supporting them in their remote learning endeavors. They congregated in a shared space in their home to create a cooperative learning environment to help each other overcome challenges, "if someone gets stuck, you just ask, and we can help each other" (Marstaller, 2020, p. 231). While navigating the difficulties of this new learning dynamic, Elizabeth tried to stay informed about the pandemic by tuning into BBC Swahili news.

Elizabeth's account mirrors the reality of many students during the pandemic. Their experiences, as widely varied as the individual home lives and circumstances that each student

may live on a day-to-day basis, shed light on the real-world implications of the pedagogical and infrastructural changes we have discussed thus far. This single anecdote provides a means for us to compare our experiences during the pandemic to what is described and allows us to foster a deeper, more empathetic understanding of the realities that some students face in the era of remote learning.

During COVID, students experienced, often for the first time, online-only learning that separated them from their classmates and their instructors. This change forced them to learn how to learn within the new environment, often having never used the technology elements that bound them to their teachers and co-learners within the space. Similarly, social interaction between students and between students and educators had to be conducted online or remotely in some fashion. These interactions could occur during the class session or asynchronously using accompanying technology tools or social media platforms and might have varied widely in format during the shifting severity levels and political reactions to the pandemic.

While schools have mostly returned to normal after the COVID-19 crisis, it is unknown when we will again need to leverage online remote instruction in response to health emergencies or similar situations. According to many of the resources cited throughout this paper, this possibility must be considered when planning for teaching and learning.

A Foucauldian Perspective on Pandemic-Era Education Narratives

In examining the pedagogical transformations initiated by and during the pandemic, it is essential to focus on the concept of discourse – a central theme in this study and a primary focus of Foucault (1972). The stories of teachers adapting their practice and the journey of a student named Elizabeth are not isolated tales; they are statements, part of a larger discursive pattern that we can examine through Foucauldian Discourse Analysis (FDA) or Critical Discourse Analysis

(CDA). In a world where social media has become a platform for individuals to voice their experiences, the discourses of teachers and learners experiencing the pandemic came to the forefront. The transition to remote learning, the efforts to maintain equity in this new environment, and the innovative methods used to keep education going all represent discourses that contributed to the ongoing construction and reconstruction of educational norms. Personal accounts, collective sentiments, and institutional and corporate stances coexist, making discourse analysis instrumental for analyzing platforms and uncovering power dynamics, along with sites of generativity and productivity, and systemic transformations.

As an educator and consultant, my experiences blend with this emerging discourse. I watched, participated in, and, to some degree, influenced the shift in discourse as education practices moved online, classrooms stretched to encompass homes, and the traditional roles of teachers and students evolved. My lived experiences and interactions I observed on social media are all statements within this larger discourse. They are pieces of the educational narrative constantly being written and rewritten in this era of unprecedented change. Our challenge and opportunity lie in understanding these discourses and harnessing their transformative potential for a more equitable and resilient education system.

Research Questions

In exploring schools' remote online instructional model throughout the pandemic, several questions emerged that would help us understand how social discourses were created and sustained or changed and what this experience was like for students, families, and educators, as viewed through ongoing social media discourse analysis. The research questions at the foundation of this study are:

1. From the COVID pandemic, what were the dominant and particular narratives that emerged?
2. What learning discourses were superordinated, subordinated, and excluded?
3. What transformative learning was enabled or constrained?

The next chapter will examine the significant theories contributing to online discourse, including Vygotsky's (1960) work on social constructivism and Moore's (1997) definitions of transactional distance, as well as an examination of discourse theory through a poststructuralist lens, which will both allow us a better understanding of Foucault's (1972) archaeology of discursive constructs and better define the creation of meaning in many areas surrounding remote online learning.

CHAPTER II

THEORETICAL FRAMEWORK

Introduction

Building on my overview of online learning during the pandemic in the previous chapter, the current chapter will dive deeper into the theoretical frameworks that underpin the research questions of the present study. These theories range from Vygotsky's (1960) social constructivism to Moore's (1997) transactional distance theory and to poststructuralist insights from Derrida and Foucault. Each approach contributes a unique lens through which we can view the online learning landscape and its evolving discourses.

To provide a brief overview of the chapter, Vygotsky's (1960) social constructivism lays the foundation for understanding learning as a socially rooted process. The theory asserts that knowledge construction arises from collaborative social interactions rather than from a one-way transmission and reception mechanism. From this perspective, the dynamics of online learning spaces and their interactivity can be better understood.

Moore’s (1997) transactional distance theory posits that educational transactions inevitably involve some distance between the student and the instructor. In an online learning setting, this distance is mediated by technology, with its characteristics impacting learning outcomes. This theory provides a valuable framework for addressing the challenges unique to remote learning.

The selected poststructuralist theories from the works of Derrida and Foucault add a dimension of power relations through discourse to the study. The works cited from these

theorists contend that knowledge and power are related concepts that emerge from social discourses, making language a critical tool that builds and transforms power dynamics and sites of generativity or productivity. Understanding these dynamics is essential when investigating the discourse produced in online learning environments.

The integration of these theories shapes my approach toward analyzing and understanding online learning and discourse. They inform the methods used for analysis in the coming chapters and create focus within the research. This chapter dives deeper into these theories and explains how they contribute to understanding the teaching and learning dynamics of the pandemic era and how they might guide future research in online learning.

Vygotsky's Social Constructivism

According to Vygotsky (1960), social constructivism is the idea that people create meaning through interaction with others. This co-construction of knowledge is both an act of collaboration and an emergence of understanding a concept or an idea. While individuals may initially have differing thoughts about or definitions of a construct, that meaning becomes negotiated through their collaborative efforts in knowledge construction.

Another essential aspect of Vygotsky's (1960) theory is the concept of "disciplinary tools," which suggests that individuals utilize various cognitive tools within their specific disciplines to make sense of the world. In many ways, these tools serve as bridges between individuals, facilitating the process of meaning-making and knowledge construction. In this model of knowledge construction, learning does not occur by the individual in isolation but is co-developed by the individual and others within the group. This social constructivism is the discourse between learners that aids them in understanding the constructs of knowledge but also becomes a part of the process of making meaning. In the sections below, I will introduce the

theories of Vygotsky that are most important to the current study – the zone of proximal development, scaffolding, collaborative learning, and internalization.

The Zone of Proximal Development

The zone of proximal development is a space between an individual's current level of understanding and that of a more competent individual. Vygotsky (1978) defined this as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p.78). Kozulin et al. (2003) also make the point that the zone of proximal development is not just an individual concept:

> Furthermore, the zone of proximal development concept can be applied to groups and individuals. ZPD is often defined as existing only in the interaction between children and others. In this way, a common misunderstanding of ZPD as a property of the child is revealed. (p. 20)

This last point makes the idea of the zone of proximal development relevant to today's culture of online remote learning. It allows us to begin to view this through a lens of the negotiated meanings between students and their peers and between students and instructors.

Vygotsky's (1960) concept of discourse communities refers to the idea that language is a tool for communication and a means of creating shared understanding within a particular group or community. Vygotsky (1960) believed children develop language and cognitive skills through interactions with more skilled community members. These interactions, known as "scaffolding," gradually shift from more explicit guidance and support to more autonomy as the child becomes more proficient in using language and thinking about specific topics.

When we look at the zone of proximal development in the context of online learning, the use of technology can provide students with access to a wealth of resources to aid in their understanding and help to support them as they move from being able to perform a task with guidance to be able to do so independently. Some examples of the resources learners may leverage to that end are peers, online tutorials, video demonstrations, and interactive learning tools. Further, as we examine online discourses about remote learning during the COVID-19 pandemic, we can see places where gaps may have existed or where particular supports were put in place to help students grow in their knowledge construction during this challenging time.

Scaffolding

Through a scaffolding process to negotiate the zone of proximal development, learners are assisted by peers, instructors, and external tools (Vygotsky, 1978). Scaffolding can be any support that moves the student's understanding forward. Some examples may be peer feedback, questioning, and modeling. Scaffolding is "a way of operationalizing Vygotsky's (1978) concept of working in the zone of proximal development" (Wells, 1999, p.127). Wells further states that scaffolding can be identified by its being dialogic in its knowledge construction, by the "artifacts that mediate knowing" (Wells, 1999, p. 127). Many of us can relate this to the activities we already use for helping students gain new understandings by leveraging their existing knowledge, peer or instructor supports, and tools external to the direct learning materials, such as supplemental learning materials.

Regarding the use of scaffolding to support learners who are discovering or building their proficiency in understanding new material, Hall (2007) suggests that when using scaffolding to help learners, course designers should analyze the tools needed and the learners' level of maturity to provide the right amount of support. Teaching materials and appropriately leveled support

should be provided to challenge learners and ensure success, with an active role for the teacher in providing timely feedback. Hall (2007) provides an example of social constructivism in a course with multiple activities, following Vygotsky's (1978) idea of teaching concepts before using them in learning tasks. The activities and tasks work together to provide a practical example of scaffolding in online learning. Hall (2007) explains how this process also exemplifies Vygotsky's (1978) Zone of Proximal Development:

> First, it shows the learning was set in an authentic environment. Second, it provided the opportunity for individual work and the opportunity for each participant to cognitively develop as they had this further opportunity to use the psychological tools that had been acquired and internalized. It also enabled the facilitator to ensure that the participants were working on the course in their ZPD and were learning. Finally, it provided the opportunity, where necessary, to provide further support or mediation in the form of scaffolding or coaching from the facilitator during the course. (p. 104)

In remote learning, scaffolding was likely in the form of specific inherent technology supports. Social media discourses can help us to understand better where learning challenges may have existed, how teachers and students may have addressed those issues, how these connections were made, and how students may have leveraged online resources to work through problems and form knowledge at their own pace with the ability to pause, rewind, replay, or re-read, as needed.

Collaborative Learning and Internalization

Vygotsky's (1978) concepts of the zone of proximal development and scaffolding emphasize the importance of social and collaborative learning to achieve cognitive development

and learning. In other words, a student's cognitive development can be maximized when collaborating with a more knowledgeable instructor or peers. This collaboration helps to move the learner through the zone of proximal development.

One final thought around the theory of social constructivism that I will mention here is that of internalization. Internalization is a prolonged process through which external cultural practices become internalized mental processes through social interactions. Vygotsky (1960) says that this happens through a series of transformations:

> (a) An operation that initially represents an external activity is reconstructed and begins to occur internally. Of particular importance to the development of higher mental processes is the transformation of sign-using activity, the history and characteristics of which are illustrated by the development of practical intelligence, voluntary attention, and memory. (b) An interpersonal process is transformed into an intrapersonal one. Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (interpsychological), and then inside the child (intrapsychological). This transformation applies equally to voluntary attention, logical memory, and to the formation of concepts. All the higher functions originate as actual relations between human individuals. (c) The transformation of an interpersonal process into an intrapersonal one is the result of a long series of developmental events. The process being transformed continues to exist and to change as an external form of activity for a long time before definitively turning inward. For many functions, the stage of external signs lasts forever, that is, it is their final stage of development. Other functions develop

> further and gradually become inner functions. However, they take on the character of inner processes only as a result of a prolonged development. Their transfer inward is linked with changes in the laws governing their activity; they are incorporated into a new system with its own laws. (p. 57)

As it applies to the online learning paradigm, internalization may present itself through various mechanisms, such as independent problem-solving, reflective practice, or collaborative learning.

Woo and Reeves (2007) connect Vygotsky's (1960) concepts to the online space and define it as a space that removes many of the limits that previously impeded authentic learning activities, such as time restraints and physically moving students to fields of practice. Within the new online space, learners can interact with "an enormous amount and variety of content" (Woo & Reeves, 2007, p. 21). The authors also make the case that instructors can provide the latest research and practical examples of applications. That information can be presented in many formats, including text, graphics, video, audio, or combinations. Providing this material online is one means of creating a space where learners can collaborate around learning objects to create meaning and learn socially.

These concepts are evident in the realities of remote learning during the COVID-19 pandemic. The zone of proximal development and scaffolding found their practical equivalents in digital platforms where students could access resources, engage with peers, or seek instructor assistance to bridge their knowledge gaps. Collaborative learning appeared through online group projects, discussion forums, and peer feedback fostering a dynamic learning environment. Finally, internalization might have been observed as students adopted new online learning

strategies, integrated shared ideas from social media conversations, or reflected upon and incorporated feedback received in the online learning space.

Vygotsky's (1960) social constructivism provides a point of view through which we can observe the online discourse among teachers and students. It allows us to examine the mechanisms of knowledge construction, and identify the elements that support or impede learning in a digital environment. These concepts lay the groundwork for answering the research questions.

Moore's Transactional Distance Theory

In parallel with the perspectives offered by social constructivism, Moore's (1997) transactional distance theory provides another means for examining interactions between teachers and students, particularly in the context of distance learning. This theory suggests that the "distance" in education is not just a physical separation between learners and teachers but a pedological concept representing varying relationships that can exist when learners and instructors are separated by time and space. transactional distance theory (Moore, 1997) provides a framework for focusing on the structure of instructional programs and the interaction between learners and teachers:

> Distance education is not simply a geographic separation of learners and teachers, but, more importantly, is a pedagogical concept that describes the universe of teacher-learner relationships that exist when learners and instructors are separated by space and/or time. This universe of relationships can be ordered into a typology that is shaped around the most elementary concepts of the field – namely, the structure of instructional programmes, the interaction between

learners and teachers, and the nature and degree of self-directedness of the learner. (p. 22)

Given the rapid shift to online learning during the COVID-19 pandemic, examining this theory in the current context adds more depth to our understanding of online learning.

The Components of Distance Learning

Moore's (1997) ideas can be broken down into the three parts mentioned above. Those components remain relevant and important through the shifts in remote learning technologies and mobile devices available today. Though the theory was introduced some time ago and technological innovations have come about since that time, we can still relate Moore's points to today's online learning environment.

The first component that Moore (1997) includes in transactional distance theory is the format of instructional dialogue. Interaction is a critical component of distance learning, in whatever learning format. Within certain early forms of broadcast-based distance learning, such as television or audiotape lessons, there was no means of interacting with the instructor since the medium did not allow for two-way communication. Other early forms, such as mail-based correspondence courses, allowed a two-way dialogue, but the medium was slow. He points out that manipulating the media can improve dialogue in the instructional process (Moore, 1997, p. 23). Within formats such as interactive web conferencing, we have more potential for dialogue between the learner and instructor (or between learner and co-learners) than through slower media formats such as email or online discussion boards. Along with the selection of communication media, dialogue is determined, in part, by the frequency of communication between the learner(s) and instructor(s) and the personality of each party. By applying this

component to the context of remote learning during the pandemic, how transactional distance was navigated and potentially minimized becomes apparent.

A second component related to dialogue within distance learning is the structure of the program of education. Moore makes the point that some courses and lessons are more structured than others and that this affects the ability of learners to interact with the instructor. There is little time for student interaction or questioning in an example where a lesson is highly scripted. The self-efficacy of the learner in these courses, the third component of transactional distance Theory, becomes a stricter requirement. "There appears to be a relationship between dialogue, structure, and learning autonomy, for the greater the structure and the lower the dialogue in a program, the more autonomy the learner has to exercise" (Moore, 1997, p. 24). Through this understanding of transactional distance, we can understand that the instructional design decisions that go into creating our online learning materials will impact the engagement of many of our students with the course's learning objects.

The Structure of Learning According to Transactional Distance Theory

Moore (1997) structures learning activities within online courses, breaking these down into presentation, support of the learner's motivation, stimulating analysis and criticism, giving advice and counsel, arranging practice and evaluation, and allowing student creation of knowledge. For each of these activity types, Moore recommends levels of dialogue and structure that are appropriate, with presentation and student motivation best served in a highly structured media format with little discussion (such as audio or video recordings or text) and critical development, application, evaluation, and learner support activities best served in a highly interactive format (such as audio or videoconferencing or correspondence) to create the opportunity for appropriate levels of dialogue within the activities.

Applying Transactional Distance Theory to Remote Learning during COVID-19

In applying transactional distance theory to a more modern environment, Falloon (2011) studied students using the Adobe Connect platform, which is like many of the technologies in use in online learning as it has been experienced in the time of COVID-19, such as Zoom, Microsoft Teams, and Google Meet. Falloon (2011) noted that the virtual classroom could positively impact relationship formation and communication information because of its highly interactive nature, including chat and screen-sharing functionality. In his discussion, he states, "it appears that the use of the virtual classroom can potentially, at least, contribute to the development of quality dialogue, but consistent with Moore's (1997) theory, it is something of a 'double-edged sword' in that the extent this is possible is contingent on structural aspects and, consequently, student perception of learner autonomy" (Falloon, 2011, p. 205).

Moore's (1997) transactional distance theory suggests that remote learning success is influenced by distance and dialogue. Applying this theory to Twitter discourses during COVID-19, it is possible to see how social media can help reduce transactional distance and foster critical analysis. By engaging in online discussions, learners can build meaning around remote learning and the specific content they are studying.

Poststructuralism

Moore (1997) and Vygotsky (1960) provide valuable perspectives on learning processes, particularly in distance education. While each of these theories brings relevant insights related to the topic, they also share common ground and can offer a means for more fully understanding and improving online learning. These theories fall within the structuralist paradigm and emphasize the systems that make up knowledge construction in this instructional model.

But the pandemic and the shift to online learning created conditions that challenge this structuralist understanding of education. Remote learning during the pandemic was characterized by unprecedented flexibility and unpredictability. The boundaries of learning spaces were and have continued to be blurred and decentralized as learners engaged in educational activities from different locations and in different ways. The diversity of learners' needs and the new requirements for students and teachers to be adaptable and resilient were also exposed as we faced this unique and challenging environment. Together, these factors challenge the structuralist ideas that rely on more fixed and predictable systems and indicate the need for poststructuralist viewpoints to better account for the complexity and fluidity of the pandemic.

Poststructuralism and Curriculum

Poststructuralism emerged in response to the ideas that had come before it, in which the focus was to understand human behavior by observing the structures within it. The structuralist school of thought was challenged in poststructuralism by thinkers like Foucault, who based their theories on a negotiated understanding of the formation of identity, power, and language. In the following sections, I briefly describe a few of the many important concepts related to poststructuralism and focus on the critical idea of the poststructural understanding of discourse.

Sarup (1993) defines the contrast between structuralism and poststructuralism by stressing that, rather than truth coming from literal understandings of the written word, poststructuralism emphasizes "the interaction of reader and text as a productivity" (p.3). The term "différance" or "the systematic play of differences, of the traces of differences, of the spacing by means of which elements are related to each other" was defined by Derrida (1968, p. 27). Thus, the interrelation between words allows language expansion as a structure and broader means of selection in modes of communication.

Cherryholmes (1988) contrasts the poststructural view of curriculum with that of other academic disciplines and finds the following differences which account for the seeming discrepancy in stability between curriculum and other fields of education, as well as between curriculum and the arts and sciences disciplines:

> Curriculum is neither historically situated in the tradition of an academic discipline nor constrained by a concrete situation. The complexity of the demands thrust upon the study and practice of curriculum contribute to its looseness, its thrashing about, its contradictions, and its lack of a center, grounding, and foundations. (p. 148)

COVID-19 further heightened the complexities within the education field and amplified the flux and discontinuity that is a defining characteristic of curriculum design. The disruptions caused by the pandemic resonate with Cherryholmes' (1988) observation that curriculum is neither tied to an academic tradition nor restrained by specific circumstances. Curriculum development - already marked by "looseness," has witnessed even more change and uncertainty in response to the pandemic's accelerated questioning of traditional structures. This emphasizes the need to reevaluate educational practices and ties the discontinuity in curriculum to the essence of poststructuralism, highlighting the need for continuous adaptation and evolution.

In observing the learning paradigm during COVID-19, the ideas at work with Foucault and Derrida contribute to a set of tools for analyzing the text and context of the ongoing online dialogue related to remote teaching and learning, allowing us to observe not only what is being said, but also its full context, in the study of discourse among remote learning participants.

Including poststructuralist concepts in this study is important for exploring the deeper dynamics within remote learning environments during the COVID-19 pandemic. Drawing on

Foucault's notions of power and discourse, the analysis can unpack the idea of power within these spaces by examining language use and identifying how certain voices may be privileged. Derrida's concept of deconstruction is equally valuable because it enables us to disentangle hidden assumptions and biases in social media discourse.

Next, I will introduce some concepts that situate poststructuralist thought within remote learning during the COVID era. Decentering and relational power, both poststructuralist ideas, underscore that meaning and power are not static but are created through constant negotiation and contextual changes. Discursive space foregrounds language's role in shaping social realities, while discourse is viewed as a system of socially constructed knowledge influenced by power dynamics and sites of generativity or productivity. These concepts, together, pave the way to explore the nuances of remote learning discourse during the COVID-19 pandemic.

Decentering

The concept of decentering rejects the idea of a single, unconditional truth that can be comprehended. Instead, meaning is continuously created through language and that there is no unmediated access to the truth or actuality. This thought is tightly associated with the notion of intertextuality, or the idea that all texts are interconnected and that there is no single, definite interpretation of a text but rather an endless number of interpretations that consistently change in relation to other texts and contexts.

In the structuralist philosophy of language accredited to Ferdinand de Saussure (2013), language was believed to be part of a structure with a specific set of rules to govern it and in which particular elements of language fit together in specific ways to provide a specific output/outcome. To explain the nature of defining structures in the absence of a mutually agreed-upon meaning, Derrida (1970) says:

> This moment was that in which language invaded the universal problematic; that in which, in the absence of a center or origin, everything became discourse - provided we can agree on this word - that is to say, when everything became a system where the central signified, the original or transcendental signified, is never absolutely present outside a system of differences. The absence of the transcendental signified extends the domain and the interplay of signification ad infinitum. (p. 279)

Here, Derrida (1970) is saying that meaning is not fixed or inherent in language but is constructed through the relationships between words and phrases and is constantly being renegotiated. He argues that a fixed or stable meaning is impossible, as every text or discourse is open to multiple meanings and interpretations. This negotiation is crucial to constructing reality and knowledge within discourse, a key theme in this study. It differs from the structuralist notion that the system of language has a rigid set of definitions and rules that must always be followed.

Derrida (1970) calls for a rearrangement of standard cultural and linguistic elements in the formation of discourse:

> The *bricoleur*, says Levi-Strauss, is someone who uses 'the means at hand,' that is, the instruments he finds at his disposition around him, those which are already there, which had not been especially conceived with an eye to the operation for which they are to be used and to which one tries by trial and error to adapt them, not hesitating to change them whenever it appears necessary, or to try several of them at once, even if their form and their origin are heterogenous—and so forth. There is therefore a critique of language in the form of *bricolage*, and it has even been said that *bricolage is* critical language itself…If one calls *bricolage* the

> necessity of borrowing one's concepts from the text of a heritage which is more or less coherent or ruined, it must be said that every discourse is *bricoleur*." (p. 280)

Here, Derrida (1970) is invoking Levi-Strauss's (1962) concept of bricolage, taking elements that are available and recombining those elements for a particular function for which they are not ordinarily used. The bricoleur changes these elements as needed through trial and error to fit the need. In the case of the COVID-19 pandemic, the use of traditional and non-traditional instructional tools could be seen as a type of bricolage in which these elements combined and evolved to meet the unique needs of students and teachers during that time.

The negotiation and collaborative construction in social constructivism are similar to the meaning-making inherent in understanding language or other structures, though thought through decentered notions of differànce. Derrida (1970) states that structures have a foundation, or center, that grounds them to limit the "play of the structure" (p. 288). Based on these initial ideas from Derrida, we understand that the meaning of our language is negotiated and possibly contentious because of its ability to be interpreted differently by others. My focus here is to emphasize that part of poststructuralism that relates most prominently to the concepts surrounding the creation of shared meanings - those about discourse and, specifically, related to its use in our understanding of the dialogues surrounding online learning during the decentering chaos of the COVID-19 pandemic. There are not necessarily existing understandings in the case of these negotiated meanings, so the discourse between students or between students and instructors becomes the foundation upon which meaning is built. This interplay aligns most directly with Foucault's ideas of power/knowledge, discourse, and identity.

Relational Power

Another critical concept in poststructuralism is the idea of relational power, which defines power as more of a pervasive force that operates through social relations than as being concentrated in the hands of a ruling elite. This view of power challenges the traditional notion of relational power as something that can be held or acquired and instead emphasizes how relational power is actively produced and sustained through social practices and discourses. As discussed earlier, this makes power a diffuse construct that ebbs and flows according to context.

Foucault (1972) says relational power does not always have to be considered negatively. He states, "Power produces; it produces reality; it produces domains of objects and rituals of truth. The individual and the knowledge that may be gained of him belong to this production" (p. 194). Relational power, according to Foucault (1980), cannot be possessed but is rather something that circulates and is constantly renegotiated. This power, according to Foucault, is inherently linked to knowledge, such that relational power creates knowledge of certain types, and knowledge creates relational power.

Foucault (1980) writes of power and knowledge as connected. In this way, In Power/Knowledge, he says, “the exercise of power perpetually creates knowledge and, conversely, knowledge constantly induces effects of power” (Foucault, 1980, p. 52). As power/knowledge relates to Discourse, Mills (2004) states that "Discourse is therefore useful in that it can allow us to analyze similarities across a range of texts as the products of a particular set of power/knowledge relations." (p. 77). In my current research, the dominant discourses surrounding emergency online remote learning could inform new understandings about the power structures and sites of generativity or productivity resulting from the current pandemic schooling model.

As it relates to online pedagogical methods and systems, we should examine how discourses of relational power have become salient, especially during the massive diffusion prompted by the COVID-19 pandemic. The transition to online platforms brought to the forefront existing power dynamics that both reinforced and challenged existing educational hierarchies. In many ways, these platforms democratized access to information and learning, while also highlighting disparities in access to technology, internet access, and digital literacy skills.

The discourses surrounding online learning might have privileged certain pedagogical methods, tools, or platforms, not necessarily because of their inherent educational value, but because of the power dynamics at play. Major technology companies, like my employer, with their vast resources and influence, might have had an exaggerated role in shaping discourse around what constitutes “good” online teaching, and might have potentially sidelined other voices.

Additionally, the nature of online interaction can shift traditional classroom dynamics, empowering some students while silencing others. The knowledge produced online is shaped by these power dynamics and sites of generativity and productivity, with algorithms and platform designs playing a significant role. Online settings can favor those with self-directed learning skills, requiring educators to be aware of these dynamics to create inclusive online spaces, using relational power as a lens to understand and address challenges.

Discursive Space

One other Foucauldian concept that is important in our examination of online discourses is that of space. Foucault used the notion of "heterotopia" to define sites that are not only limited but also "contested and inverted" (Foucault, 1986, p.3). It is traditionally accepted that Foucault

uses the term heterotopia to define sites of resistance. Topinka (2010), however, suggests that they are sites in which epistemes collide and overlap, creating an intensification of knowledge" (p. 55) or "sites of resistance" (p. 56).

As we continue to define online remote learning and online discussion of remote learning, the "sites" with which we interact are not only those in which we interact with learning objects in the online space but also those in which we interact with co-learners or instructors to organize ourselves and share information through ongoing discourses about our experiences in doing so. This constant interaction with others allows us to problematize and, in many cases, redefine our online pedagogical methods, both in terms of seeking best practices and in reacting to changes effected on public education by school and public health organizations, as well as by the power/knowledge dynamic inherent in the remote learning paradigm.

Discourse

While I provided a cursory section on discourse and discourse analysis in the first chapter, I intended at that time to create a working definition of the terms to introduce the broad scope of this research. In the present chapter, I will provide a deeper working definition of the term as well as some context around how it will be used in this research. I now establish discourse's deeper theoretical foundation in order to delineate the discursive elements used in analyzing online discourses about remote learning.

Foucault (1980, 1990, 1995) contributed to understanding many fields through their deconstruction. His influence on the current research lies not in the broader philosophical implications and notions of poststructuralism but within its notion of discourse. According to Foucault (1972), discourse is a mechanism of power that shapes people's thoughts, behavior, and interactions in the world. Through discourse, specific ideas and concepts are placed in

opposition, allowing one idea to become dominant and the other subdued to create meaning and understanding. The power dynamic inherent in this relationship strengthens the favored conversation within the discursive construct. It diminishes other options or beliefs so that those that do not fit within the dominant discourse are subdued. Poststructuralism allows us to investigate how we can question the existing order, construct different interpretations, and resist established power dynamics through discourse, ultimately leading to novel opportunities for interacting with the world. By analyzing their embedded power relations and sites of generativity or productivity, we can also understand how our identities have been shaped by the various discourses we are exposed to. This understanding allows us to challenge the norms placed upon us and create new opportunities for interacting with the world.

Fairclough (1995) says that discourse is "language viewed in a certain way; as a part of the social process (part of social life) which is related to other parts. It is a relational view of language" (p.7). In Power/Knowledge, Foucault (1980) profoundly explores how discourse is used to construct the subject not only in terms of what he or she (or even a system of power) is saying but in terms of what this means through the subject's unstated meaning, through its operational constructs, and through the interrelation of others with it. Gee (2015) similarly describes the interrelatedness of "big 'D' Discourse" to both what is said and the subject's ways of being:

> The notion of “Big ‘D’ Discourse” (“Discourse” spelled with a capital “D”) is meant to capture the ways in which people enact and recognize socially and historically significant identities or “kinds of people” through well-integrated combinations of language, actions, interactions, objects, tools, technologies, beliefs, and values. The notion stresses how “discourse” (language in use among

> people) is always also a “conversation” among different historically formed Discourses (that is, a “conversation” among different socially and historically significant kinds of people or social groups). The notion of “Big ‘D’ Discourse” sets a larger context for the analysis of “discourse” (with a little “d”), that is, the analysis of language in use. (p. 1)

In the above quote, Gee (2015) explains "Big 'D' Discourse" and its relationship to identity formation and language use. "Big 'D' Discourse" refers to how discourses are formed and sustained through conversations among different social groups, expanding how language use, or "little 'd' discourse," can be analyzed and emphasizing how language use is permanently embedded in more significant relationships and social structures.

In a description of Foucault’s earlier statements, Mills (2004) discusses:

> Instead of gradually reducing the rather fluctuating meaning of the word 'discourse,' I believe I have, in fact, added to its meanings: treating it sometimes as the general domain of all statements, sometimes as an individualizable group of statements, and sometimes as a regulated practice that accounts for a number of statements. (p. 80)

To understand these definitions better, Mills states that the second definition - 'an individualizable group of statements' - is used more frequently in the context of the specific commonalities that exist between groups of statements - for example, this could relate to a discourse of femininity or a discourse of racism. According to Mills (2004), the third definition may be more salient to theorists and is that of 'a regulated practice which accounts for a number of statements'. Mills (2004) interprets Foucault's (1972) meaning here as that 'discourse' is more

concerned with the rules that create utterances and texts that are the primary focus and how the interplay of rules, systems, and discourse exemplifies the power/knowledge relationship.

Understanding discourse in a broader context is essential to the research questions guiding this study. In response to the online learning experienced during COVID-19, one could consider the connections between specific ongoing online discourses as a phenomenon to be investigated, but this becomes more meaningful or differently meaningful when taken together with common utterances among like or dislike groups of people, or within a specific period, or in reaction to the rules or systems to which specific statements are made.

In the context of this study, the relationship between discourse, truth, and power/knowledge creation becomes vital due to the nature of the hybrid remote learning paradigm of COVID-19. The power relations and sites of generativity or productivity inherent in digital equity and access to technology create many questions about the efficacy of such measures for ongoing teaching and learning. By analyzing and understanding the discourses through the critical examination of online dialogue, we will better understand some of the dominant discourses and those that are quieted by this power relation to better address the needs of all learners.

Linguistic Turn

The 'linguistic turn' in curriculum studies, as articulated by Jupp (2009), offers a vital theoretical lens for examining the discourse surrounding remote learning as it emerged on Twitter during the pandemic. Jupp underscores the linguistic turn's emphasis on language not merely as a reflection but as a constructor of reality, a perspective that is especially pertinent when analyzing social media discourse. This shift brings to light the idea that discourse is not a passive mirror of public opinion or educational experience but an active participant in shaping

the realities of education. In this light, discourse analysis becomes a means to unravel the ways in which linguistic representations contribute to the understanding, development, and potentially the reconceptualization of educational paradigms. Jupp's perspective acknowledges the potency of language and recognize discourse as a dynamic space where educational narratives and realities are continuously (re)constructed and (re)negotiated.

Discursive Elements in Foucault

Having explored the relevance of crucial poststructuralist concepts to this research, I will now shift my focus to further unpack the elements of discourse relevant to the analysis of Twitter discourse in this study. Foucault (1972) creates an understanding of knowledge production through the various elements of discourse – statements, discursive formations, discursive strategies, and continuity and discontinuity. The framework created by Foucault (1972) offers a lens through which we can understand the complexities of the interactions of knowledge and power and how they shape each other in the context of online learning during the pandemic. The following sections will examine each of these discourse elements more fully.

Statements

Foucault's (1972) definition of 'discourse' as elaborated on by Mills (2004) necessitates defining the statement as the basic unit of discourse that creates and disseminates knowledge. Statements are not limited to linguistic utterances but can encompass any form of communication that conveys meaning, such as images, symbols, videos, or links to external sources. The purpose of analyzing statements is to situate them into the more extensive network of relations that are discursive formations. In the context of my study, individual tweets related to remote learning constitute statements that contribute to the overall discussion on the topic. When analyzed collectively, these statements can provide insights into the discursive formations,

strategies, continuities, and discontinuities that characterize the discussions and debates surrounding remote learning.

Discursive Formations

Discursive Formations refer to the paradigms of discussion and communication that create and sustain power dynamics and sites of generativity or productivity within a specific field of observation. Discursive Formations are created through knowledge and power relationships rather than through accumulated information. Knowledge and power, in other words, shapes reality in these relationships.

Discursive Formations comprise statements, themes, concepts, and the interplay of these elements. Discursive formations can be identified by a regularity among these components within a specific area of knowledge and are governed by power dynamics and sites of generativity or productivity. Analysis of discursive formations can reveal how individuals and groups perceive and interact with specific subjects, like remote learning during the COVID-19 pandemic.

Foucault (1972) discusses discursive formations and the "relationships of which they are capable" (p.31). He describes discursive statements and their relations, beginning by stating that two problems exist in doing this. First, he points out that he has indiscriminately used "statement, event, and discourse." Secondly, there may exist some relationship between statements when they "have been left in their provisional, visible grouping" (p.31)

As an example, Foucault (1972) calls out how this contradiction of related statements in a single "retrospective grouping" (p.31) could be categorized accordingly:

> Statements different in form and dispersed in time form a group if they refer to one and the same object. Thus, statements belonging to psychopathology all seem

> to refer to an object that emerges in various ways in individual or social experience and which may be called madness. (p. 31)

The problem arising from this categorization is that madness, for example, is not a single object but a collection of related mental illnesses and conditions. To describe the broader category of madness, we must examine the connected discourses thoroughly. As Foucault (1972) says:

> Moreover, the unity of the discourses on madness would be the interplay of the rules that define the transformations of these different objects, their non-identity through time, the break produced in them, the internal discontinuity that suspends their permanence. Paradoxically, to define a group of statements in terms of its individuality would be to define the dispersion of these objects, grasp all the interstices that separate them, and measure the distances that reign between them - in other words, to formulate their law of division. (p.31)

Foucault's (1972) hypothesis is that we should look at the relations between the type of connection between statements and points out that this relationship is sometimes between statements and a style, or a "certain constant manner of statement" (p. 33). The relationships between groups of statements, then, can be linked to cohesive concepts or a "corpus of knowledge" (Foucault, 1972, p. 33).

The final argument that Foucault (1972) puts forth along these lines is:

> But perhaps one might discover a discursive unity if one sought it not in the coherence of concepts, but in their simultaneous or successive emergence, in the distance that separates them, and even in their incompatibility. (p. 35)

Foucault (1972) admits that his previous four attempts to find unity within discursive formations have failed. About objects, he says, "[w]hat appeared to me were rather series full of

gaps, intertwined with one another, interplays of differences, distances, substitutions, transformation." In place of statements, he identifies "uninterrupted text." Instead of concepts, Foucault (1972) points out that the rules governing their use of them make them "ignore or exclude one another" (p. 37). Finally, regarding themes, he finds "various strategic possibilities that permit the activation of incompatible themes, or, again, the establishment of the same theme in different groups of statement" (Foucault, 1972, p. 37).

The rules of dispersion in this search for discursive unity allow us to see how these ideas - statements, objects, themes, and concepts - along with their separation, relations, and dispersions, become part of the interplay between the concepts. Foucault (1972) states:

> Whenever one can describe, between a number of statements, such a system of dispersion, whenever between objects, types of statements, concepts, or thematic choices, one can define a regularity (an order, correlations, positions, and functionings, transformations), we will say, for the sake of convenience, that we are dealing with a discursive formation - thus avoiding words that are already overladen with conditions and consequences, and in any case inadequate to the task of designating such a dispersion, such as 'science,' 'ideology,' 'theory,' or 'domain of objectivity.'" (p. 38)

In discussing emergent discursive formations, Deseriis (2017) discusses how the idea of technopopulism evolved through the existing discourses on populism and technolibertarianism. While the discourses themselves were created across many media, according to the author, the resultant ideology of technopopulism contends that the "government of the people, by the people, for the people" (Lincoln 1953 [1863]) is achievable through information communication technology. According to Deseriis (2017):

> This discursive formation emerges from the convergence and hybridization of two distinctive discourses: technolibertarianism and populism. Technolibertarianism is a stratified discursive formation that incorporates three distinct strands - capitalist, communalist, and activist. The social web's automation of cooperation has allowed for the activist and communalist strands to coordinate massive political campaigns such as the Internet Blackout and to experiment with increasingly sophisticated decision-making processes for the management of digital commons. Even though the lack of autonomy of social media activism from the commercial platforms that enable it should be a matter of serious concern to activists, the mass diffusion of social network sites has allowed them to reach ordinary citizens. (p. 441)

In the present study, which will analyze Twitter discourses about remote learning during the start of the COVID-19 pandemic in the United States, I have identified specific discursive formations that were emergent within the discourses on Twitter following my initial familiarization with the data. The themes related to my own experiences during the COVID pandemic. These are sketched in chapter three and elaborated on as findings in chapter four.

Discursive Strategies

Foucault (1972) introduces the concept of discursive strategies, which are methods used by individuals and groups to hold power and influence knowledge through communication by shaping discourse. This can be accomplished through framing, rhetoric, and using select evidence to promote specific agendas or manipulate public opinion. Examining discursive strategies of remote learning during the pandemic will reveal how educators, students, and policymakers navigate the discursive landscape and contribute to shaping the discourse. These

strategies come from individuals and are ingrained in the societal systems and discourse fields in which they operate.

Discursive strategies are related to discursive formations in that they operate within and contribute to creating and promoting formations. Discursive formations are the paradigms of discussion and communication that shape and maintain power relations and sites of generativity or productivity within a specific field. At the same time, strategies are used to assert influence within these formations.

Fairclough (1995) says of the relation of Critical Discourse Analysis to discursive strategies:

> CDA has an important role in critical research focused on strategies because strategies have a strongly discursive character: they include imaginaries for change and for new practices and systems, and they include discourses, narratives, and arguments that interpret, explain, and justify the area of social life they are focused upon – its past, its present, and its possible future. These discursive features of strategies are crucial in assessing and establishing their practical adequacy to the state we are in and the world
> as it is and their feasibility and desirability concerning particular ideas of human well-being. (p. 18)

The pandemic has brought to light the power of discourse in constructing and maintaining power structures and sites of generativity or productivity. Discursive strategies, which involve using language to shape and influence our views and opinions, are evident in how remote learning is portrayed. Discourse shapes our views on remote learning and the policies and regulations implemented.

In the context of remote learning during the pandemic, discursive strategies can be observed in the way stakeholders use language to shape perceptions, opinions, and experiences related to online education. By examining these strategies, researchers can better understand how power structures and sites of generativity or productivity are built and maintained through discourse and the implications of these dynamics for remote learning policies and practices.

Continuity and Discontinuity

Continuity and discontinuity are concepts that Foucault (1972) used to describe the nonlinear process of knowledge creation and how it persists over time. Continuity refers to a continuation of the historical perspective of knowledge, while discontinuity refers to the poststructuralist idea that knowledge is created by disrupting existing ideas and perspectives. When viewed through the lens of discursive formations, continuity and discontinuity challenge the traditional understandings of stable meanings and identities. Considering the pandemic, the idea of what it meant to be a teacher changed from what it had always been up to that time. Instead, such discontinuities suggest that discourse constantly negotiates and transforms meanings and identities.

Foucault (1972) states:

> The notion of discontinuity assumes a significant role in the historical disciplines. For history in its classical form, the discontinuous was both the given and the unthinkable: the raw material of history, which presented itself in the form of dispersed events - decisions, accidents, initiatives, discoveries; the material, which, through analysis, had to be rearranged, reduced, effaced in order to reveal the continuity of events. (p. 1)

When we view continuity and discontinuity from a poststructuralist-discursive sense, the characterization and identity of something is not an unchanging, stable entity but a continuous progression and variation over time. Along with extensive consequences in many areas, there is a distinct effect on how we comprehend and interact with one another through language and how we form our identities.

The concepts of continuity and discontinuity can be observed in online learning, representing both an extension of traditional schooling (continuity) and a departure from it (discontinuity), as it shifts power away from the institution and provides students with more agency in their learning process. Specific continuities and discontinuities that I expect to be revealed in the context of online discourses about remote learning are outlined in the next chapter.

Conclusion

In this theoretical frame, the interactivity between Vygotsky's (1960) social constructivism, Moore's (1997) transactional distance theory, and poststructural insights from Foucault and Derrida provided a multifaceted lens for analyzing remote learning discourses during the pandemic. Critical Discourse Analysis offers a structured approach for ensuring holistic exploration of the topic and offers a deep understanding of the journey through remote learning amidst the unprecedented challenges of a global health crisis.

CHAPTER III

METHODS

Introduction

This chapter outlines the methodological approach employed in this study to examine the discourses surrounding remote learning during the initial stages of the COVID pandemic in the United States. The research design was rooted in qualitative research, particularly Critical Discourse Analysis (CDA), as informed by Fairclough (2015). These methods were underpinned by the theoretical framework detailed in the previous chapter, drawing on social constructivism, transactional distance theory, and the poststructural thinking of Derrida and Foucault.

The research questions for this study were:

1. From the COVID pandemic, what were the dominant and particular narratives that emerged?
2. What learning discourses were superordinated, subordinated, and excluded?
3. What transformative learning was enabled or constrained?

In the following sections, I describe the research design for this study, including the rationale for the chosen methods and how they aligned with the research questions above. After this, I delve into the specifics of data collection, describing the process of retrieving and filtering tweets from the Twitter platform and the criteria that was used for data selection. The chapter then outlines the data analysis process, providing a step-by-step guide on how I applied Fairclough's (2015) Critical Discourse Analysis to the data and how Foucault's (1972) discursive elements were identified and analyzed in the sampled tweets. The chapter acknowledges the

limitations and delimitations of the research, recognizing the constraints of the chosen methods and the scope of the study. This chapter guides the methods used and provides a clear and concise roadmap for how I examined the discourse on remote learning.

Research Design

This study was qualitative and focused on the analysis of discourse in the online space. Qualitative research is particularly suited to exploring and understanding the complex experiences of individuals and groups. It allows for a deep exploration of the relationship between language and power. This idea was central to this study's goal of uncovering the power dynamics, along with sites of generativity and productivity, and transformations in learning that were negotiated through Twitter discourses during the COVID-19 pandemic and because it lent itself to the data source of online discourses, which are unstructured and may or may not contain unique constructs such as likes, retweets, and comments, and may vary in structure with the inclusion of media files and hyperlinks.

The choice of Critical Discourse Analysis (CDA) as the primary research method was justified by its focus on the role of discourse in the construction and negotiation of social understandings. CDA, as defined by Fairclough (2015), provides a framework for analyzing the discursive elements in tweets related to online learning. It allows for examining the dominant and particular narratives that emerged during the pandemic, the superordinated, subordinated, and excluded learning discourses, and the transformative learning that was enabled or constrained.

Building on the foundation of qualitative research, this study delved into the intricate web of online discourses, particularly on the Twitter platform, which became a hotspot for educators, students, and other stakeholders to share, debate, and, through Twitter’s inherent fluidity, to

navigate both the challenges and the opportunities of remote learning during the pandemic. The presence of likes, retweets, comments, media files, and links adds layers of depth to these conversations. Additionally, these elements provide rich contextual cues that enable more nuanced understandings of the sentiments and ideologies presented.

The online space is not just a passive repository of information; it's an active arena where power dynamics and sites of generativity and productivity play out, identities are constructed, and meanings are co-created. The asynchronous nature of online interactions, coupled with the global reach of Twitter and similar platforms, means that discourses evolve over time, influenced by a myriad of sociocultural, political, and technological factors. This dynamic environment necessitates a research approach that is both flexible and rigorous.

The choice of CDA was not just methodological, but also epistemological. It aligned with the study's underlying belief that knowledge is socially constructed and that discourses play a pivotal role in shaping our understanding of reality. By analyzing tweets through the lens of CDA, this study aimed to map the discursive landscape of remote learning during COVID-19, highlighting dominant narratives, marginalized voices, points of contention, and areas of agreement. The aim of the present study was to contribute to the broader discourse on online education and offer insights that could inform policy, practice, and future research.

Critical Discourse Analysis

Critical Discourse Analysis is intrinsically linked to poststructuralism and emphasizes the intricate power dynamics and societal structures embedded within language. More specifically, however, CDA draws heavily from Foucault's (1972) Archaeology of Knowledge, which seeks to uncover the rules and systems that govern the production of knowledge and discourse in various contexts. Thus, CDA highlights the interplay between power, knowledge, and discourse.

Critical Discourse Analysis, deeply rooted in the work of Fairclough (2015), brings a thoughtful and organized methodology to the foundation of Foucault's discursive elements. The three-tiered reverse immersion strategy at the heart of this methodological approach provides a systematic means of exploring Twitter discussions, peeling back the layers to expose the true nature of the discourses discovered. The uniqueness of tweets as a data source necessitated some modifications to Fairclough's (2015) method. The brevity of tweets requires a sharpened focus on nuanced meaning condensed into a limited number of characters. Twitter's interactive nature also calls for examining retweets, replies, and likes, which can shed light on the dynamics of discourse production and reception in this space.

Within the next section of this chapter, I identify a reverse immersion strategy for analyzing the data set sampled from tweets during the start of the COVID-19 pandemic in the United States. The discursive elements mentioned in this paper contributed to that reverse immersion strategy by identifying specific statements, formations, strategies, and continuities and discontinuities identified in the content or context of these tweets. They contributed to a holistic understanding of what has been said and what is understood about this interesting time in our country's education history.

Data Collection

Considering the research questions and potential insights from the analysis of tweets about remote learning during the initial stages of the COVID-19 pandemic in the United States, a systematic and comprehensive data collection method was essential. This section outlines the data retrieval, filtering, sampling, and preprocessing process.

Data Retrieval

The initial step in my data collection process was retrieving the tweets to be analyzed. A dataset of 201,581 tweets containing the hashtags #onlinelearning or #remotelearning was collected using the advanced search capabilities of Tweet Binder. These tweets were written in English and originated from within the United States and, thereby, have no intention of accurately representing all online learning in the United States much less creating a positivistic catalogue of what happened in online learning communities. The retrieved data included the full text of each tweet and its attributes, such as images, links, videos, likes, replies, and retweet count. These criteria resulted in 201,581 tweets posted from February 28, 2020, through May 28, 2020. This comprehensive data collection allowed for a multi-faceted analysis of the discourse surrounding remote learning during the pandemic, but it is important to note that I was studying only the language of the tweet universe and its representations, which, emphatically, was not the same as what happened in online communities across the United States or the World. Following Foucault and CDA, I was following and tracing discursive data only.

Data Filtering and Sampling

Following the retrieval of tweets, the data underwent a rigorous filtering and sampling process in Microsoft Excel. The purpose of this filtering process was to ensure relevance and diversity in the data. The initial dataset of 201,581 tweets was filtered on the following criteria:

Temporality. Only tweets from the very start of the pandemic in the US were considered. For this, the time constraints on the data were limited to those tweets posted between February 28, 2020, and April 4, 2020, were used. Those collected tweets after the April 4th end date were excluded.

Relevance. Only tweets that directly addressed remote learning experiences, challenges, or opinions during the initial stages of the pandemic in the United States were included. Irrelevant tweets or those that did not contribute to the discourses under consideration in this study were excluded. This primarily included tweets that were directly related to remote learning during COVID.

Engagement. Tweets with over 100 retweets were selected. This filtering criterion was to ensure the inclusion of tweets that had a significant impact or reach within the Twitter community. Additionally, the comments, replies, and quotes within Twitter threads provides rich data which aided the analysis of tweets and added color to the discussion.

Diversity. Tweets representing a wide range of perspectives, including those from or about educators, students, parents, and policymakers, were included, ensuring a broad understanding of the discourse across different stakeholder populations. While the majority of the tweets originated from accounts belonging to teachers or edtech specialists, other voices were present. After applying this criterion, the dataset was narrowed down to 12 diverse tweets.

Purposive Sampling

This extensive search result brings me to a discussion of sampling within the study. Because the research centered on a large lake of data from which interesting observations could occur, the study employed a purposive sampling method. Purposive sampling is a non-probabilistic sampling strategy in which the researcher actively selects specific units to be included based on his research criteria. In the current study, this meant choosing specific tweets related to remote learning during COVID-19 to be included in the analysis. Tweets were selected from a pool of potential tweets, which had already been filtered based on the inclusion of the

selected hashtags, temporal parameters, language, and location. This allowed for further narrowing of the data.

Data Preprocessing

Before the analysis phase, the collected data was preprocessed to ensure quality and consistency. Data preprocessing involved removing duplicate tweets and retweets to avoid data redundancy. The text data was cleaned by removing or replacing special characters, URLs, mentions, and emojis to ensure an accurate analysis of linguistic features. This preprocesssing step ensured that the data were clean and in an appropriate format for further filtering and analysis.

This method for data collection ensured a comprehensive representative sample of tweets about remote learning during the initial stages of the COVID-19 pandemic in the United States. The resulting dataset was primed for an analysis that addressed the research questions and provided valuable insights into the discourse of remote learning. Additionally, the power dynamics and social implications of remote learning could be analyzed and discussed.

Data Analysis

This study utilized a reverse immersion strategy to analyze collected tweets, similar to the framework of Critical Discourse Analysis introduced by Fairclough (1995) described in the previous chapter. A reverse immersion strategy is an inductive approach to data analysis that involves moving from specific instances of discourse to broader themes. Fairclough (2015) outlined this type of strategy for the study of discourse by defining three different levels at which discourse occurs:

> Discourse, then, involves social conditions, which can be specified as social conditions of production and social conditions of interpretation. These social

> conditions, moreover, relate to three different 'levels' of social organization: the level of the social situation, or the immediate social environment in which the discourse occurs; the level of the social institution which constitutes a wider matrix for the discourse; and the level of the society as a whole. (p. 57-58)

Fairclough (2015) suggests that these social conditions shape texts' production and interpretation. This broader understanding of the context in which discourses occur allows for a more nuanced understanding of how texts are understood. Fairclough (2015) continues:

> So, in seeing language as discourse and as social practice, one is committing oneself not just to analyzing texts, nor just to analyzing processes of production and interpretation, but to analyzing the relationship between texts, processes, and their social conditions, both the immediate conditions of the situational context and the more remote conditions of institutional and social structures. Or, the relationship between texts, interactions, and contexts. (p.58)

Wachter (2018) leverages the analysis defined by Fairclough (2015), stating the latter's understanding of text, "Texts are social spaces in which two fundamental social processes simultaneously occur: cognition and representation of the world, and social interaction" (Fairclough 1995, p. 6) is an essential definition of the text that occurs on Twitter. Further, Wachter (2018) discusses the use of discourse in media:

> Furthermore, I chose to consult Fairclough's (1995) model of critical discourse analysis because he emphasizes the production and consumption of texts, as well as the representation of discourse within media. These two aspects are considered essential in social media, and as a result, the method is compatible with the study of these platforms (Unger et al., 2016). Considering that "Language use – in any

> text – is always simultaneously constitutive of (1) social identities (2) social relations and (3) systems of knowledge and belief" (Fairclough 1995b, p. 55), a study by the model of critical analysis of social media texts presents an excellent opportunity to examine social practices on Twitter in this study. (p.16)

Concerning the analysis model introduced by Fairclough (1995), Wachter (2018) modifies the process to include contextualization based on the visual and practical aspects of retweets. She states, "Therefore, I incorporated their description (and partly their analysis) in the first layer of my model." (Wachter 2018, p. 24).

The reverse immersion strategy defined by Fairclough (1995) and modified by Wachter (2018) was beneficial for analyzing data in this study using Critical Discourse Analysis because it enabled me to identify the underlying power relations and sites of generativity or productivity, ideologies, and social implications of discourse on remote learning during the COVID-19 pandemic. The following steps provide a description of the reverse immersion strategy that was used for this study:

Familiarization

I began by immersing myself in the data collected. This consisted of reading through the tweets multiple times to gain a general understanding of the discourse, and identifying recurring themes, patterns, or linguistic features. During this familiarization step, I noted initial impressions and emerging ideas.

Micro-level Analysis

The next step in analyzing the data was conducting a detailed examination of the linguistic features of the tweets, focusing on elementary aspects such as vocabulary, grammar, and rhetorical devices. Additionally, I identified how these aspects contributed to constructing

meaning and expressing power relations and sites of generativity or productivity within the discourse. At the micro-level, Fairclough's (2015) method begins with the language itself, examining the intricate details of syntax and semantics. The spotlight here is on the nuts and bolts of individual tweets and on scrutinizing people's linguistic choices when constructing their narratives.

Meso-level Analysis

During the next research step, I focused on identifying discursive strategies employed by the speakers within the tweets. These strategies included the framing of remote learning experiences, the use of metaphors and analogies, and the construction of us-versus-them narratives, all based on the Foucauldian (1972) constructs discussed in the theoretical frame. During this phase, I also assessed how these strategies served to construct, legitimize, or contest specific meanings and representations within the discourse. In the meso-level of analysis, the investigation shifted its focus from the "what" to the "how." In this research phase, the discourse was analyzed in action, where "how" tweets were produced and received was examined, along with observing how the tweets interacted with one another to create the social reality of remote learning.

Macro-level Analysis

Moving from specific instances of discourse into broader statements and formations, as well as exploring the connections between identified themes and patterns and the wider social, political, and cultural contexts in which they are situated, was the focus of the next phase of data analysis within the study. Here, it was essential to consider how the discourse on remote learning echoed and shaped broader power structures and social practices during the pandemic. At this level, the lens was broadened to capture the bigger picture, contextualizing these discourses

within the context of societal and cultural events. Here, how narratives are shaped by, reflect, and challenge prevailing norms and values could be examined.

Synthesis and Interpretation

In the final step of my data analysis, I synthesized my findings and interpreted them in relation to the research questions and objectives of the study. This allowed me to consider the implications of my findings for understanding remote learning during the COVID-19 pandemic. Additionally, it informed future policy, practice, and research in online education.

This expanded reverse immersion strategy provided a rich and nuanced analysis of the discourse on remote learning during the initial stages of the COVID-19 pandemic in the United States, enabling me to generate meaningful insights into the complex interplay between language, power, and social practice in this critical period. This synthesis of Fairclough's (2015) Critical Discourse Analysis paved the way for a comprehensive exploration of the discourse surrounding remote learning during the COVID-19 pandemic. By scrutinizing the micro, meso, and macro levels of discourse, this research sought to tell the complex and diverse stories of remote learning during this unprecedented time.

Second Phase Analysis

A second phase analysis of prevalent themes was next used to provide a more comprehensive understanding of the remote learning discourse and draw connections between the original tweets and others. This analysis added depth to the findings from the individual tweets, showing how they collectively reflect broader themes in education during this critical period. The insights gained from this section directly aligned with and provided an enriched view of the themes that were discussed in the examination of the initial sample, from teacher recognition to technology use in remote learning.

Preliminary Categories

As discussed in the previous chapter, I identified certain discursive formations and continuities and discontinuities within my own experiences and within the Twitter discourses around online learning. While I expected the data to reveal other themes, these stood out as the most salient to me. Additionally, they were prominent in the discourse. They included:

Technological challenges

The discursive formation related to technological challenges included discourses surrounding the difficulties in transitioning to remote learning technologies. At a minimum, this included challenges such as internet connectivity, software difficulties, and hardware issues. This discursive formation highlighted the digital divide and the need for better infrastructure to support remote learning.

Pedagogical shifts

Next, discursive formations related to the pedagogical shifts required to move to remote learning were revealed. These discursive formations included conversations about changes in teaching and learning methods and curricula, including the effectiveness of remote learning compared to in-person learning. These conversations addressed the challenges and opportunities presented by online education and the need to adapt the way we teach in this new paradigm.

Mental health and well-being

The discourse on mental health and well-being was also a major topic in the data. Discussions on mental health and well-being included the emotional and psychological impact of remote learning on students, families, and educators, which emphasized addressing mental health issues and supporting all stakeholders during crises. While the focus was primarily on students'

well-being and emotional health, some discourses also discussed the health of teachers and others.

Accessibility and inclusivity

The data also exposed discursive formations related to equity in remote learning. This formation highlighted the need for inclusive policies and practices in online education, and included discourses on ensuring equal access to remote learning opportunities for students with disabilities or from disadvantaged backgrounds. The need for equitable access to devices and the internet remained, and was indeed exacerbated, through the shift to remote learning.

Social interactions and isolation

The discursive formation related to social interactions and isolation included conversations about the lack of face-to-face interactions in remote learning and its impact on socialization and development. This relates closely to the social aspects of learning as discussed in the previous chapter's inclusion of Vygotsky's (1960) social constructivism. This emphasizes the importance of maintaining relationships and social connections and supporting a sense of community in remote learning scenarios.

Continuity in teaching and learning

Despite the shift to remote learning, some aspects of traditional schooling existed. These included elements such as textbooks, assessments, and teacher-student interactions. Specific tweets highlighted how these elements were adapted to the online environment and maintained a sense of consistency and familiarity for students and educators.

Discontinuity in teaching methods and tools

As the previous section relates to continuities that were observed in education, many discontinuities were also revealed. The pandemic accelerated the adoption of new technologies,

online platforms, and transformative teaching strategies. Twitter data highlighted discussions about videoconferencing tools, learning management systems, and asynchronous learning methods that departed from traditional in-person teaching methods.

Continuity in educational values and goals

Conversations on Twitter emphasized the importance of maintaining core educational values. These included a focus on equity, accessibility, and inclusivity, and promoted other existing goals like critical thinking. It was revealed that such goals and values persisted throughout the pandemic.

Discontinuity in social interactions and engagement methods

Remote learning changed the dynamics of student-to-student and student-to-teacher interactions. Twitter discourses called out the loss of in-person social experiences, difficulties of engaging learners online, or potential impacts of isolation on well-being and mental health. The impact of the loss of social experiences was a concern within remote learning.

Continuity in educational policies and expectations

Certain Twitter discussions during the pandemic revealed conversations about maintaining education standards. Among the identified standards were grading policies, and expectations for students and teachers, despite the shift to remote learning. This focus on existing policies differed from district to district and school to school during the pandemic.

Discontinuity in the role of parents and caregivers

With remote learning, parents and caregivers assumed new responsibilities in supporting the education of students in the home. Twitter conversations pointed to some of the challenges families faced in balancing work and home life, providing adequate learning environments, and ensuring children remained engaged in learning.

In the same way that the categories of discursive formations mentioned above contributed to the qualitative coding of specific Twitter artifacts used in this analysis of discourses, the continuities and discontinuities mentioned here contributed to the research in much the same way. In other words, these continuities/discontinuities and others revealed during data analysis allowed me to codify and classify the corresponding data more thoroughly.

Discursive Limitations and Delimitations

This study, like any research, has limitations and delimitations that should be acknowledged to provide context for interpreting the findings. The identification of the limits of the study, importantly puts it in context with other research during or about COVID-19. It allows us to more easily identify where future studies may extend our understanding of the time.

Limitations

Scope of Twitter Data. While Twitter is a widely used social media platform, it does not represent the entire discourse on remote learning during the COVID-19 pandemic. Some stakeholders, for example, may prefer other platforms or might not have access to Twitter. The perspectives captured in this study were limited to those expressed on Twitter within limited hashtags and conversation threads and may not fully represent the views of all stakeholders involved in remote learning.

Demographic Representation. Twitter's user base is not fully representative of the general population. Certain demographic groups may be over- or under-represented on the platform, which may have influenced the findings of this study. For this reason, the design of the study was paramount in producing useful insights about the pandemic.

Algorithmic and Self-selection Bias. The data collected from Twitter may have been influenced by the platform's algorithms, which curate content based on users' past behavior.

Posts that are more sensational or apt to attract engagement from users are more likely to show within any specific user's feed. Additionally, the study was subject to self-selection bias, as it relies on tweets from users who chose to engage in discussions about remote learning at specific times throughout the pandemic.

Delimitations

Time Frame. This study was delimited to the initial stages of the COVID-19 pandemic in the United States. Specifically, this included posts from February 28, 2020, to April 4, 2020. The findings did not reflect discourses on remote learning that emerged later in the pandemic or in different geographical contexts.

Language and Location. The study was further delimited to English-language tweets from within the United States. Due to the large data lake from which data were initially selected and to produce results that were most relevant to education stakeholders within the United States, this made the data selection and analysis more manageable. Discourses on remote learning in other languages or from different geographies were not considered in this study.

Hashtag Selection. The study focused on tweets that included the hashtags #onlinelearning or #remotelearning. These hashtags are commonly associated with discussions on remote learning. While there may have been relevant discourses under different hashtags, those were not considered in this study.

My research aimed to acknowledge these limitations and delimitations while providing a focused and nuanced analysis of the discourses on remote learning during the initial stages of the COVID-19 pandemic, as represented in the selected Twitter data.

Conclusion

In this chapter, I have presented a comprehensive methodology for examining the discourse on remote learning during the initial stages of the COVID-19 pandemic in the United States. By leveraging the power of social media data, specifically Twitter, I aimed to gain a deep understanding of the narratives, power dynamics and sites of generativity or productivity, and transformations in learning that emerged during this unprecedented time. Critical Discourse Analysis, guided by the theories of Foucault and Fairclough, allowed me to delve into the discursive formations, strategies, continuities, and discontinuities present in the tweets. This approach enabled me to uncover the underlying power structures and social implications of the discourse on remote learning.

However, I acknowledge that the study had limitations and delimitations. While providing a rich source of public discourse, Twitter data may not fully represent the experiences and perspectives of all stakeholders in remote learning. Furthermore, the focus on tweets with specific hashtags within a particular timeframe and from the United States delimited the scope of the research.

Despite these limitations, the research provided valuable insights into the discourse on remote learning during the pandemic. This study's findings can inform future practices and policies in remote education, particularly in response to crises. As I proceeded with the data collection and analysis, I strictly followed this plan for the research to ensure that the guidelines in this chapter were maintained.

CHAPTER IV

FINDINGS

Introduction

This chapter follows the methods described in the previous chapter to analyze six carefully selected tweets and then conduct an expanded thematic analysis of a broader selection of tweets. This begins with a brief restatement of the sampling and research method used. Next, it proceeds into a thorough analysis of the individual, selected tweets through the parallel application of the critical discourse analysis to those digital artifacts. Finally, the chapter moves into a thematic analysis of a broader set of tweets that is based on the discursive formations identified in the initial analyses of those six tweets.

Data for this study were sampled using a broad filtering approach combined with purposive sampling informed by my professional background to arrive at a specific tweet universe based on the content, related hashtags, locality, and temporality of the tweets. The analysis of the selected data was structured into sections and facilitated the examination of the data at several levels: micro, meso, and macro. Each section was methodically designed to peel back the layers of discourse to reveal linguistic, sociocultural, and ideological dimensions embedded within the tweets, comments, and replies.

Critical Discourse Analysis of Six Tweets

The analysis of the six most-engaged-with tweets was completed according to the reverse immersion strategy described in Chapter 3 and offers insights into various aspects of remote learning during the COVID-19 pandemic. This is summarized in the following table.

Table 1

Themes identified in the six analyzed tweets

Tweet Number	Author	Summary	Theme	Engagement (likes, comments, retweets)
Tweet 1	Cara	A Michigan educator humorously emphasizes the disconnect between her professional status and her children's perception of her at home.	"Parent-Teacher Paradox"	11,500/124/485
Tweet 2	Kathleen Morris	An educator announces a comprehensive guide to online teaching and encourages sharing it with others.	"MEGA Resource Sharing"	1200 / 57 / 760
Tweet 3	Kellie Bahri	A tweet emphasizing the prioritization of students' emotional needs over academic demands during remote learning.	"Empathetic Empowerment"	1100 / 25 / 122
Tweet 4	Kathi Kerszno wski	Kersznowski recommends using the hashtag #RemoteLearning to highlight posts sharing resources for remote learning. The tweet, indicative of the early pandemic response, suggests preparations for "temporary school closures," a concept not yet prevalent at the time.	"Digital Community Building"	450 / 37 / 277
Tweet 5	Matt Miller	Miller poses the question, "What can students do WITHOUT INTERNET during #remotelearning?" and shares an infographic along with a blog article suggesting ten activities for students lacking internet access.	"Empowering Educational Equity"	875 / 26 / 606
Tweet 6	Mike Tholfsen	Tholfsen's tweet endorses the use of Microsoft PowerPoint and Office 365 for remote learning, emphasizing features like built-in screen recording and "Publish to Stream" as essential for creating and sharing educational content.	"Technology as an Education Enabler"	1300 / 54 / 944

Tweet 1 – "Parent Teacher Paradox"

This analysis examined the dual roles of educators during remote learning insightfully portrayed in a tweet. The tweet, with 124 comments, over 11,500 likes, and 485 retweets, shed light on the challenges and contradictions faced by educators who are also parents. It highlighted the complexity of balancing professional expertise with the unpredictable nature of teaching one's own children. This situation, experienced during the pandemic, offers both humor and a deeper understanding of this dual role.

Figure 1

Tweet 1 from Cara

The tweet came from Cara, a former Michigan Teacher of the Year with 2,648 followers. Her limited Twitter bio, alongside her other COVID-related posts, revealed her advocacy for empathy, compassion, and educator-led discussions around returning to in-person schooling. Cara, also known as Cara Lougheed, served as Michigan's Region 9 and state Teacher of the Year in 2019-2020 and taught for 21 years before becoming a placement coordinator at Oakland University. The tweet primarily addressed educators and parents, especially resonating with those teaching their own children in a remote setup, a situation where traditional classroom appreciation might differ.

Figure 2

Cara's Twitter Profile

Micro-Level Analysis of the Original Tweet. Cara's tweet humorously captured the "Parent Teacher Paradox", highlighting the juxtaposition of her accolade as Michigan Teacher of the Year against her own children's unimpressed attitudes towards homeschooling with her. This playful contrast revealed the often-unseen emotional labor of educators, particularly when their professional and domestic roles intersected during the pandemic. Her tweet, “Just so everyone is clear: my children are not the least bit impressed with being homeschooled by the Michigan Teacher of the Year. 🤷🏻‍♀️”, laced with hashtags like #Homeschooling and #remotelearning, did more than just share her status. The shoulder-shrugging emoji and hashtags built a sense of community among educators navigating similar challenges, expressing both a resignation to and an acceptance of this new reality in education.

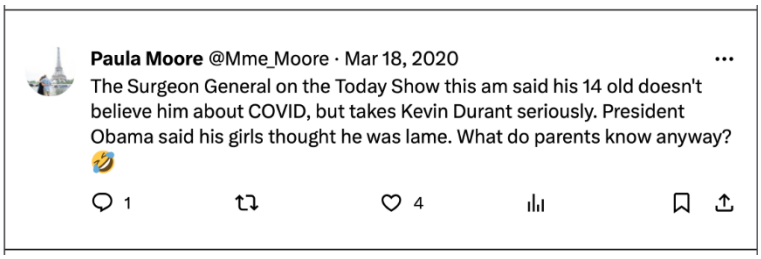
Figure 3

Tweet from Amanda Jones

Micro-Level Analysis of Comments and Replies. Amanda Jones' response to Cara's tweet, infused with humor and colloquial language, deepened our understanding of the Parent Teacher Paradox. Through her anecdotal, rhetorical question-laden recount of her child's reaction to literary suggestions, she amplified the ironic, yet universal truth faced by educator-parents: their own children often view them differently than the rest of the world. These narratives, teeming with conversational tones, internet parlance, emoticons, and hashtags, coalesced into a larger narrative reflecting significant shifts in educational practices during the pandemic.

Figure 4

Tweet from Paula Moore



Responses were peppered with rhetorical questions and self-deprecating humor, serving a dual purpose. They echoed the challenges of homeschooling while also using humor to lighten the gravity of these situations, as seen in comments like "What do parents know anyway? 🤣". Emotional expressions, from shared laughter to the loving frustration encapsulated in these tweets painted a picture of shared experiences among educators.

The exchanges, rich in self-reflective levity and candidness, showcased the adaptability and resilience of educators as they navigated the uncharted waters of teaching in a global crisis. The Parent Teacher Paradox thus offered not just a glimpse into the personal lives of educators during the pandemic but also mirrored the broader evolution in educational discourse.

Meso-Level Analysis of the Original Tweet. Cara's tweet humorously highlighted her children's nonchalance towards her Michigan Teacher of the Year status, setting the stage for an insightful discourse. This single tweet served as a window into the complex dual roles of educators, blending professional acclaim with familial dynamics. It revealed a contrast that many educators experience, where professional achievements are often met with indifference at home. Her lighthearted approach not only humanized educators but also shed light on the irony they often face in balancing these dual identities.

Figure 5

tweet from @quinnstras with reply from cara

Figure 6

Tweet from Nicole O'Mara

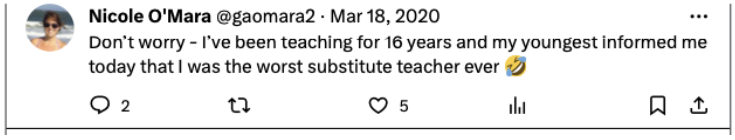
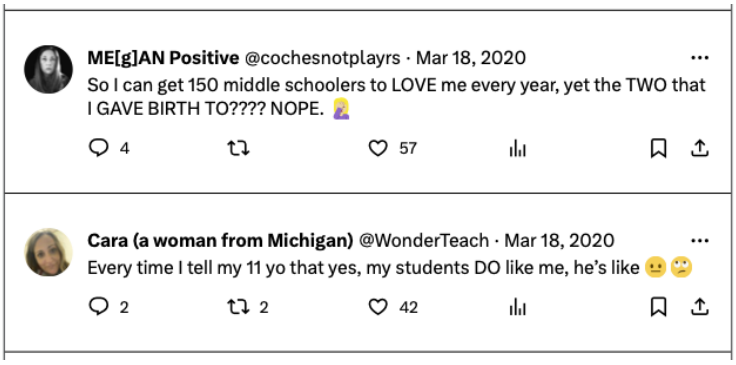


Figure 7

ME[g]AN Positive comment with reply from Cara



Meso-Level Analysis of Comments and Replies. The responses to Cara's tweet, particularly Amanda Jones' remark about her daughter's similar disinterest, resonated with a common narrative among educators. These replies employed humor as a unifying language, connecting personal anecdotes to a broader shared experience. The educators' self-deprecating comments bridged their professional accomplishments with their at-home realities. For instance, Quinn Strass's recount of his son's reminder about a past accolade and Nicole O'Mara's portrayal of being labeled the "worst substitute teacher" by her child reflected a blend of irony, frustration, and humor. These interactions, rich with candid expression and solidarity, echoed a collective voice of educators. The conversation, as seen in comments like ME[g]AN Positive @cochesnotplayrs', underscored the often-unappreciated efforts in their homes compared to the respect they garnered professionally. This created a story of shared struggles and empathy, illustrating the resilience and adaptability of educators amidst the pandemic.

Macro-Level Analysis of the Original Tweet. Cara's tweet encapsulated broader societal themes, particularly highlighting the evolving roles of parents and educators in the context of remote learning. This conversation at a macro level underscored the "Parent Teacher Paradox", where educators are celebrated professionally but often find their efforts less

acknowledged at home. This paradox brought to the forefront the resilience and adaptability of teachers and underscored the societal need for greater recognition and support for educators, emphasizing the emotional labor involved in their dual roles.

Macro-Level Analysis of Comments and Replies. The responses to Cara's tweet and subsequent discussions illuminated the heightened role of parents in their children's education, a shift accelerated by remote learning. These conversations shed light on the challenges faced by parents, many of whom are not formally trained as educators, yet play a pivotal role in their children's learning. This shift signified a broader societal adaptation to new roles and responsibilities during the pandemic, altering family dynamics and educational approaches.

Further, the dialogue touched upon the experiences of teachers in the remote learning context – their struggles and the often-limited recognition of their efforts. This discourse highlighted the societal need to better acknowledge and support educators adapting to new learning environments. It also raised larger questions about the value society places on educators' work and the support structures needed in crisis times.

Another significant theme emerging from these interactions was the challenge of engaging students in a remote setting, exacerbating the "Parent Teacher Paradox". This situation highlighted broader concerns about online education's effectiveness and the need for innovative strategies to maintain student interest and participation. Additionally, the discourse reflected broader societal adjustments and resilience in response to the abrupt shift to remote learning. It showcased the creativity and flexibility of educators, students, and parents in adapting to pandemic-induced challenges, symbolizing the broader theme of societal resilience and innovation under duress.

Lastly, the exchange indicated a shift in societal attitudes towards education and parenting. The pandemic not only disrupted educational mechanics but also prompted a reevaluation of traditional roles and values associated with teaching and parenting. The shared experiences in these tweets brought to light the often-unseen emotional labor of parenting and teaching, highlighting how societal norms and attitudes are both challenged and reinforced in times of crisis.

Synthesis and Interpretation. Cara's tweet, set in the pandemic's remote learning context, sharply contrasted educators' professional recognition with their family roles. Termed the "Parent Teacher Paradox", this highlighted the diverging value of educators in professional versus personal spaces. Illustrated through Cara's children's indifference to her teaching, it shed light on the complexities and adjustments needed in remote learning, emphasizing the struggles of educator-parents and challenges in student engagement.

This narrative was closely aligned with the study's theoretical framework. Through social constructivism (Vygotsky, 1960), it underlined educators' dual identities in professional and familial settings. The tweet spotlighted how social interactions molded perceptions of roles, situating educators in a dual reality: celebrated professionally but sometimes overlooked at home. Furthermore, transactional distance theory (Moore, 1997) was evident in the discourse's exploration of the emotional and cognitive divide between educators' personal and professional lives. The juxtaposition of academic respect and familial disregard typified the transactional distance in these dual roles, revealing the dissonance between societal acknowledgment and family dynamics.

The discourse challenged conventional norms around the roles of teachers and parents. According to Foucault (1972), subjects are shaped by power dynamics and sites of generativity

in language and social relations. This challenged the idea of a single authoritative source, underscoring the decentering of traditional roles.

At the heart of the pandemic narrative was the shift to remote learning with its inherent challenges. The tweet embodied this, characterizing parents' struggles in homeschooling, teachers' undervalued efforts, and the hurdles in student engagement remotely. It humorously pointed to the irony of a distinguished educator's children who were unimpressed with her teaching, which spotlights the intricacies of remote learning.

The dialogue further emphasized the contrast between professional respect and familial indifference. This theme, mirrored in Amanda Jones' comment, touched on a broader societal issue: the disparity in public and private recognition of educators. It extended to the universal challenges of adapting to remote learning, humorously depicted in Nicole O'Mara's struggles with engaging her children.

Key discourses included remote learning challenges, parents' roles in homeschooling, and the need for innovative engagement strategies. These were prominent in the tweet and comments, mirroring dominant experiences in the pandemic's early stages. Examining these discourses further could enrich our understanding of the 'Parent Teacher Paradox'.

Less emphasized were discourses on teacher support, educators' resilience and creativity, and mutual support among Twitter users. Present but understated, these reflected remote learning and homeschooling challenges, highlighting varying educator experiences within and outside their homes. Excluded were student perspectives, institutional support for remote learning, and socio-economic impacts. These areas, absent in the tweet and its comments, represent untapped dimensions of the shift to remote learning.

The transition to remote learning catalyzed educational transformations, like greater parental involvement in education, teachers' development of innovative strategies, and collective adaptability among educators, students, and parents. It also fostered experience sharing and mutual support, contributing to communal learning and adaptation. However, this transition also posed constraints on transformative learning. Parental challenges in remote learning, unrecognized teacher efforts, and student engagement issues could affect remote learning's long-term efficacy. The tweet and comments accentuated these limitations, underscoring the necessity for more resources and support in remote learning scenarios.

Tweet 2 – "MEGA Resource Sharing"

Tweet 2, initiated by Kathleen Morris (@kathleen_morris), garnered attention with 57 comments, over 1200 likes, and 760 retweets. It announced a comprehensive guide for online teaching amidst school closures due to COVID-19. This tweet was a testament to the educational community's spirit of collaboration and support during the crisis. It emphasized the vital sharing of instructional resources and the unified effort of educators in adapting to remote teaching. The tweet was more than a resource; it was a call to action, inviting others to disseminate the guide to those who might benefit. It became a central platform for educators and thought leaders to exchange ideas, resources, platforms, and teaching strategies.

Figure 8

Tweet 2 from Kathleen Morris

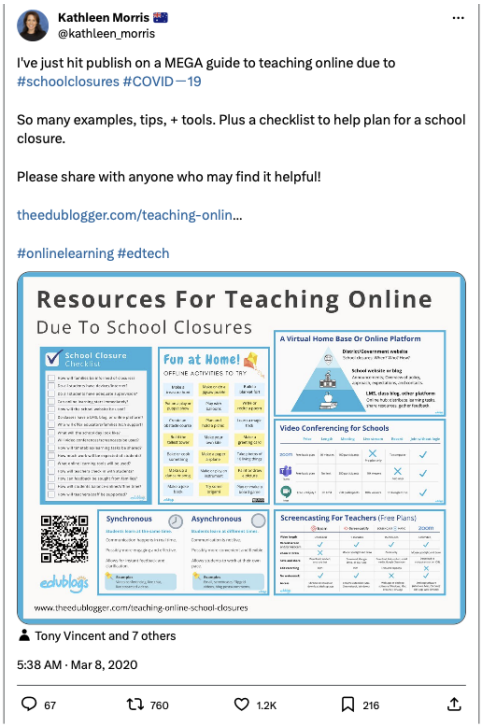
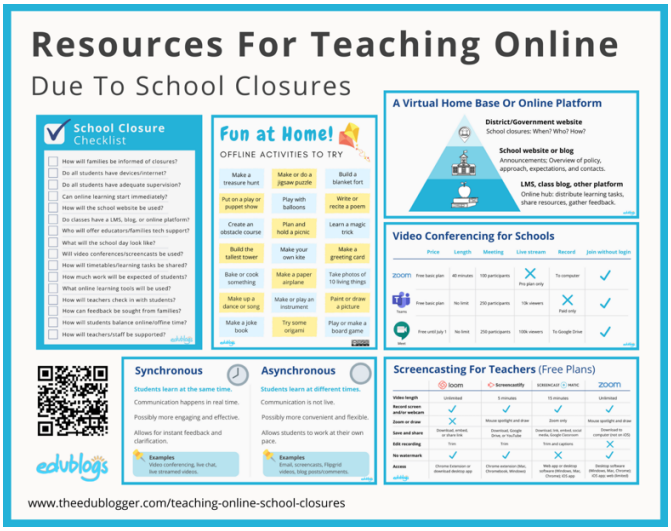


Figure 9

MEGA resource graphic from Kathleen Morris



Kathleen's Twitter profile describes her as a "primary school teacher, blogger and mum, currently on hiatus", with 9,853 followers. Her blog, http://www.kathleenamorris.com, features

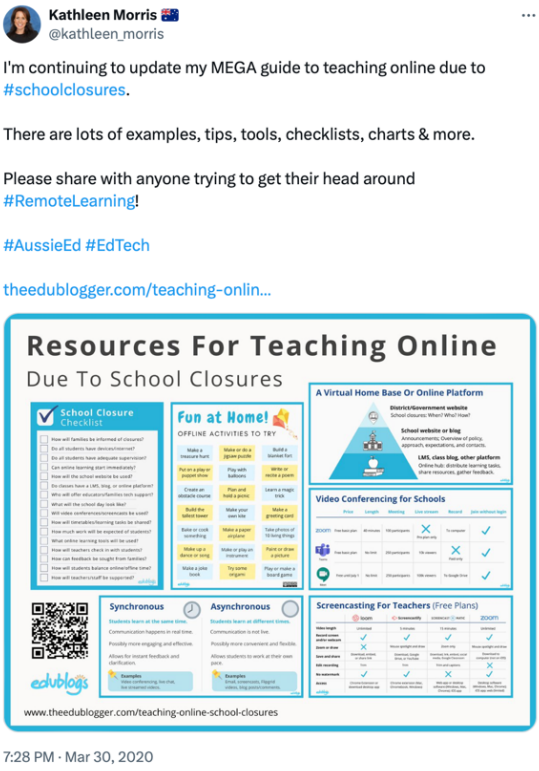
posts from 2009-2020 about digital citizenship, online publishing, global collaboration, research skills, and educational technology. Her tweets frequently include resources within these categories, alongside an updated version of the MEGA Resource Guide discussed in this analysis.

Figure 10

Kathleen Morris' Twitter profile

Figure 11

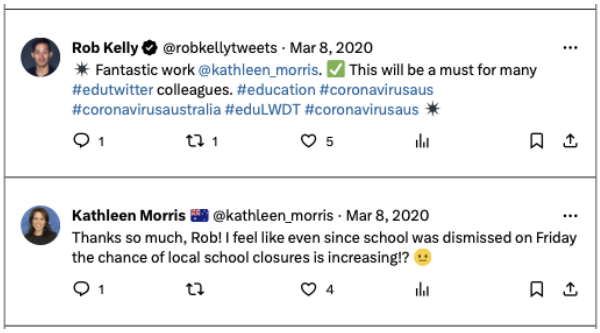
Kathleen Morris post about updating her guide



Micro-Level Analysis. The language used in this conversation mirrored the immediacy and unfamiliarity of pandemic-era remote learning. Terms like "MEGA guide," "online teaching," and "school closures" reflected the abrupt transition and the demand for comprehensive educational resources. "MEGA guide" suggested a substantial, resource-rich compilation, indicative of the educator community's eagerness to share knowledge during this shift. "Online teaching" and "school closures" encapsulated the transformed educational environment, while "COVID-19" anchors the discourse in the broader context of the global crisis.

Figure 12

Rob Kelly comment with reply from Kathleen Morris



The vocabulary also subtly revealed power dynamics. Kathleen Morris's use of "Please share" in her tweet wasn't just a request; it was a directive, positioning her as an authoritative resource sharer and the audience as distributors. This linguistic choice implied a power structure but also suggested a collective effort to improve online education.

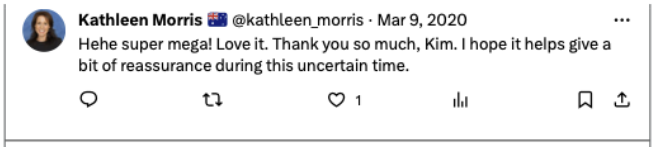
Grammar played a role in shaping meaning and power relations. Kathleen's use of active voice in "I have published a MEGA guide…" portrayed her as an active, engaged participant in addressing educational challenges. The present perfect tense in "I have published…" suggested the guide's ongoing relevance, emphasizing its importance and inviting the education community to unite in resource sharing.

Figure 13

Kim Maslin comment about MEGA guide

Figure 14

Kathleen Morris reply to Kim Maslin



Rhetorical tools like hashtags and hyperlinks were pivotal in the tweets. Hashtags such as #schoolclosures and #remotelearning connected the conversation to wider dialogues about pandemic-impacted education, acting as markers to related discussions and pools of collective wisdom. Hyperlinks, like the one leading to the "MEGA guide," functioned as conduits to external, more expansive resources, thus broadening the discussion's scope. Emphasis, shown through asterisks around "Please share", underlines the urgency and significance of the call to action. The heart emoji in Kathleen's comments added an emotional layer, expressing gratitude and a sense of community.

Figure 15

Kathleen Morris comment regarding sharing

Additionally, the use of asterisks around the phrase "*Please share*" served to emphasize the call to action, reinforcing the urgency and importance of the message. The use of the heart emoji in Kathleen's comments conveyed an emotional dimension, expressing gratitude and appreciation along with a communal purpose. The image included in Kathleen's tweet was an infographic containing a checklist for school closure preparedness, as well as sections related to online platforms, video conferencing technologies, screencasting information, and a comparison of synchronous and asynchronous instructional methods. Additionally, the post contained a

section of offline activities, which also acknowledged the equity issue within education by providing activities that could be accomplished in low-tech or no-tech home environments.

Finally, the tweet referenced Kathleen's in-depth blog post, "Resources for Teaching Online Due to School Closures". Starting with reflective questions on sudden instructional shifts, the article covered UNESCO statistics on global school closures, offering a comprehensive guide. With detailed sections on instructional planning, video conferencing, digital reading materials, and handling obstacles posed by school closures, Kathleen's post truly embodied. a "MEGA Guide" for educators transitioning online.

Meso-Level Analysis of the Original Tweet. Kathleen Morris's tweet during the COVID-19 school disruptions brought to light a phenomenon through the term "MEGA Resource Sharing." This is where educators not only adjusted to the new normal but also engaged collaboratively in creating and disseminating extensive educational resources. Her tweet epitomized this approach by curating and sharing a multitude of tips, lesson plans, and teaching strategies through various online platforms like blogs and social media. This collective endeavor underscored the educational community's resilience and ability to adapt amid unprecedented challenges.

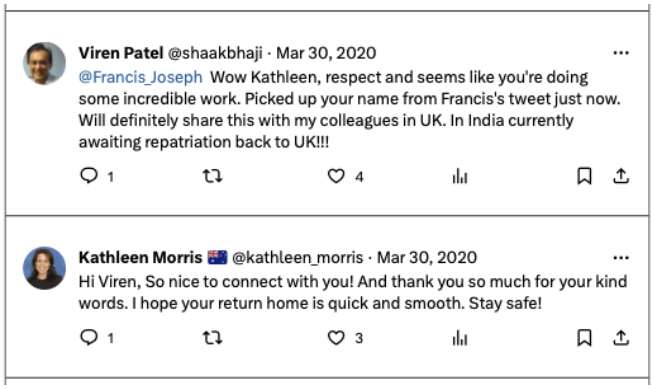
Meso-Level Analysis of Comments and Replies. The responses to Kathleen's tweet extended this theme of collaborative adaptation and resource sharing. Practical demonstrations shared within the replies, like using Google Slides for lesson planning, served more than instructional purposes. They also helped normalize and validate these digital tools as crucial elements of online teaching, thus bridging the gap between theory and practice and making these strategies more accessible to a wider range of educators.

The power dynamics within the conversation reflected a synergy between educational directives and teacher independence. While guidelines and expectations were disseminated top-down from educational authorities, there is a strong thread of teacher autonomy and empowerment. This was reflected in the diverse planning and delivery strategies for online lessons shared among educators, indicating a balance of authoritative guidance and individual educator creativity.

Macro-Level Analysis of the Original Tweet. The macro-level analysis of Kathleen Morris's "MEGA guide to teaching online" tweet illuminated broader societal and cultural themes, linking this educational dialogue to wider social transformations during the pandemic. Morris's announcement and the subsequent reactions encapsulated a global shift in education, where teachers worldwide collaboratively pooled and exchanged online teaching methods and materials. This change reflected not just in education but across various sectors, demonstrating a universal shift to digital platforms and interactions, highlighting a global pivot to virtual operations.

Figure 16

Viren Patel comment and Kathleen Morris reply



Macro-Level Analysis of Comments and Replies. The comments and responses to the tweet further illuminated this global digital transition. Viren Patel's comment, "Wow Kathleen

respect and seems like you're doing some incredible work... Will definitely share this with my colleagues in the UK. In India currently awaiting repatriation back to the UK!!!" (Viren Patel, 2020), emphasized the pandemic's worldwide reach. This reflected a global educational challenge and the necessity of international solidarity and resource sharing, transcending geographical boundaries.

Figure 17

Laura Smith Benson thanks Kathleen Morris

Laura Smith Benson's expression of gratitude, "Enormous thank and respect @kathleen_morris" (Laura Smith Benson, Mar 8, 2020), underscored a broader appreciation for community leadership and resilience. It mirrored society's dependence on effective leaders who guide and support communities through crises. Furthermore, the responses exhibited a profound change in educators' roles. Teachers rapidly adapted to online methods, evolving from traditional roles to becoming digital content curators and online community facilitators. This transition was emblematic of a wider societal reevaluation of professional responsibilities in crisis response.

The urgency and unity displayed in these interactions highlighted a societal and cultural push to preserve educational continuity. They affirmed the education sector's dedication to maintaining learning through collaborative efforts. This pandemic era discourse underscored the universally acknowledged importance of education and the collective ethos of resource sharing and professional support, highlighting the adaptability and resilience of communities under challenging circumstances.

Synthesis and Interpretation. The narratives surrounding Kathleen Morris's tweet on her "MEGA guide to teaching online" revealed key insights into the educational shifts during COVID-19. This discourse exemplified Vygotsky's (1960) social constructivism, showing how educators collaboratively build their remote teaching skills. The tweet exemplified the use of online platforms for educators to collectively develop and share knowledge, thereby enhancing the overall understanding of remote teaching and learning. In terms of Moore's (1997) transactional distance theory, the guide aimed to bridge the gap in online teaching by providing comprehensive resources, thus enhancing remote teaching effectiveness and fostering a cohesive online education community. This effort signified a move towards reducing transactional distance and bolstering interactive, collaborative remote learning. Additionally, the discourse around the tweet challenged traditional education norms, advocating for innovative online teaching methods. Morris's guide, along with the associated discussions, aligned with Foucault's (1972) concept of knowledge production through discourse, suggesting that innovative teaching methods can redefine educational power dynamics and knowledge structures, democratizing knowledge creation and distribution.

Dominant narratives emerging from this dialogue included the abrupt move to remote learning, the need for thorough resources and guidance, and the emphasis on community collaboration. This stress on resource sharing became a key narrative, showcasing educators' efforts to pool knowledge in response to the new challenges. Specific narratives highlighted educator well-being, technology tool integration, and innovative pedagogical approaches, offering detailed insights into educators' pandemic experiences.

Superordinated discourses foregrounded the significance of online learning resources, the role of technology in remote learning, and the value of community support, reflecting the

immediate concerns of the education community. Subordinated discourses, while present, focused less on the challenges of remote learning, systemic support for educators, and the pandemic's long-term educational impact. However, these discourses still touched upon the need for more inclusive resource sharing mechanisms to address various challenges. Excluded from this discourse were student and parent perspectives, challenges faced by marginalized communities, and broader societal and policy impacts of the shift to remote learning. This invites consideration of excluded voices and essential resources for equitable education in future crises.

The discourse suggested the pandemic enabled transformative learning by necessitating teaching innovation, technology integration, and new community forms among educators. However, constraints also emerged, like the rushed nature of the shift to remote learning, limiting thorough pedagogical transformation, and challenges such as technology access, educator stress, and unrepresented perspectives in the discourse, hindering full transformative learning potential.

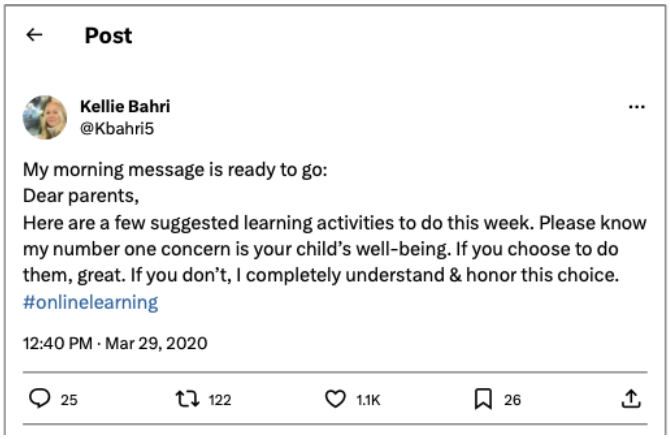
Tweet 3 – "Empathetic Empowerment"

Tweet 3 focused on prioritizing students' emotional well-being alongside academic demands, emphasizing the more empathetic approach educators adopted during the pandemic. The tweet deep-dived into the importance of understanding and addressing the emotional needs of students, highlighting the role of educators in providing support and empowerment during challenging times. The discourse reflected the broader shift towards prioritizing holistic well-being in education, acknowledging the development of students beyond academic achievement. The conversation was started in a tweet by Kellie Bahri (@Kbahri5). It had 25 comments, over 1100 likes, and 122 retweets. The post states, "My morning message is ready to go: Dear

parents, Here are a few suggested learning activities to do this week. Please know my number one concern is your child's well-being."

Figure 18

Tweet 3 by Kellie Bahri



According to her Twitter profile, Bahri had over 15,100 followers and is an Instructional Specialist, children's book author, and education enthusiast. A link to her personal website, kelliebahri.com revealed a synopsis of several stories and activities by the author, as well as eight blog articles related to student well-being and empowerment, with titles such as Do a Thing, Building a Strong Sense of Self, and Share the World with Our Students.

Micro-Level Analysis of the Original Tweet. The original tweet by Kellie Bahri used positive and supportive language, including the words "well-being". This choice of words reflected an empathetic approach, aiming to foster a supportive and inclusive remote learning environment. It underscored the importance of considering students' emotional states as central to their learning journey during the pandemic. The vocabulary aligned with the theme of educational equity, stressing the need to balance emotional and mental well-being with academic achievement in these challenging times.

Micro-Level Analysis of Comments and Replies. The responses to the tweet and subsequent discussions amplified this theme of empathy and support. The use of exclamatory phrases like "Kids before curriculum!" and "Thank you for loving your families" served as a rhetorical tool to express strong emotions and stress the importance of the messages. These exclamations aligned with the theme of parental involvement, highlighting parents' and caregivers' crucial roles in supporting their children's learning and well-being.

Figure 19

Tara Desiderio comment with reply

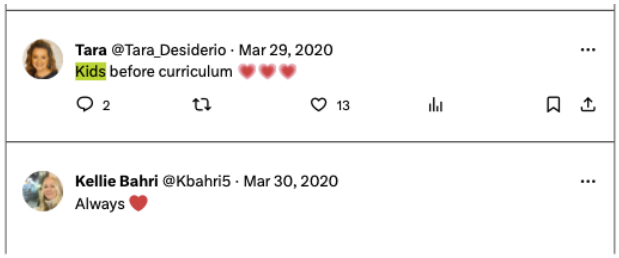
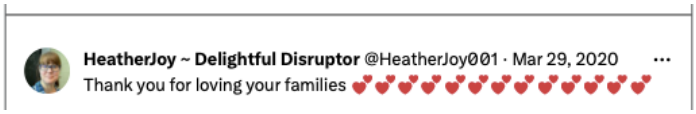


Figure 20

Heather Joy gratitude post



Emojis in the replies added a visual layer to this supportive language. The frequent use of heart emojis enhanced the emphasis on emotional and mental health in education. Transforming from simple decorative elements, these emojis became powerful symbols of sentiment and solidarity. Exclamatory statements paired with heart emojis, such as "Kids before curriculum 💗💗💗" and "Thank you for loving your families 💞💞💞💞💞💞💞💞💞💞💞💞," functioned as emphatic rhetorical devices. They reinforced the narrative that education during remote learning should balance academic learning with emotional support, emphasizing the integral role of family in the educational framework.

The grammatical choice of using first-person pronouns ("I," "we," "us") fostered a sense of personal connection and collective experience. This reflected a strong community and collaborative spirit among educators, highlighting a key aspect of the narrative around teacher support and professional development during the pandemic. Overall, the vocabulary, exclamatory phrases, emojis, and personal pronouns combined to create meaningful discourse, articulating the power dynamics in the context of pandemic-era education.

Meso-Level Analysis of the Original Tweet. In Kellie Bahri's tweet about remote learning during the COVID-19 pandemic, the meso-level discourse analysis uncovered a range of discursive strategies shaping the educational conversation. Bahri's tweet emphasized an "Empathetic Empowerment" approach, acknowledging the need for emotional support in students alongside academic guidance. This approach set a tone of positivity and support for remote learning, resonating with the essential need for empathy during the challenging times of the pandemic.

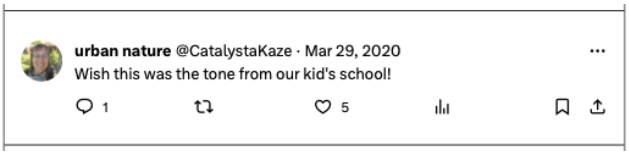
Meso-Level Analysis of Comments and Replies. The responses to Bahri's tweet extended this empathetic and supportive narrative. The conversational tone, personal pronouns, and emojis used in the replies contributed to creating a sense of community among educators, parents, and students. This communication style encouraged active dialogue and participation, fostering an open and understanding atmosphere. The supportive nature of the replies reflected the discourse's success in establishing a community committed to adapting to remote learning and prioritizing student well-being.

Figure 21

Carla Ingraham comment

Figure 22

Comment from Urban Nature



Furthermore, the discussion also touched upon differing opinions within the educational community, highlighting diverse policies and their impacts across various districts. These contrasting views brought to light the various roles education plays during crises, reflecting the multifaceted challenges and responses within the field. Overall, this meso-level analysis showcased how diverse discursive methods were utilized to frame, affirm, and question meanings within the context of remote learning. These strategies collectively fostered a supportive and inclusive environment, signaling a societal trend toward more empathetic and adaptable educational approaches in times of crisis.

Macro-Level Analysis of the Original Tweet. Tweet 3 by Kellie Bahri illustrated a significant shift in educational discourse, showcasing educators advocating for a compassionate, student-centered approach. This reflected a transformation in educational priorities, emphasizing heightened empathy and understanding over a traditional, solely academic focus. The educators' dialogue around 'Empathetic Empowerment' championed a teaching philosophy that placed students' emotional well-being at the forefront of learning. It highlighted the critical role of emotional support and community in overcoming remote learning challenges.

Macro-Level Analysis of Comments and Replies. The responses to Bahri's tweet expanded on this theme of empathy in education. Discussions about disparities in educational access and support, particularly noted in comments about public service campaigns promoting kindness, extended the empathy narrative to include broader societal efforts towards educational equity. These comments shed light on the pandemic's varying impacts on different student demographics.

Moreover, the discourse also underscored the ongoing need for support and professional development for educators, acknowledging the challenges they face in adapting to new technologies and practicing self-care. This discussion reflected the evolving role of educators and a concerted effort by educational systems to balance the dual requirements of technological proficiency and emotional well-being.

In summary, the conversation surrounding Bahri's tweet revealed a collective aspiration for educational equity, increased parental involvement, and robust teacher support. It marked a transformative move towards a more empathetic, flexible, and student-centric educational model. These dialogues shed light on potential long-term changes in educational policies and practices, advocating for systemic shifts to address inequalities and focus on the holistic well-being of students.

Synthesis and Interpretation. The discourse from tweets and their responses during the COVID-19 pandemic revealed a significant shift in educational focus. Moving beyond solely academic achievement, there was a collective turn towards holistic student well-being, resonating with Vygotsky's (1960) social constructivism. This reorientation towards a student-centered approach was evident in Bahri's emphasis on child well-being and Desiderio's rallying call of "Kids before curriculum." Their messages highlighted "Empathetic Empowerment,"

underscoring the importance of nurturing students' emotional health and advocating for a compassionate, comprehensive approach to education. This narrative also underscored the expanding role of parents in supporting their children's education and the necessity for continual support and professional development for teachers.

At the forefront of learning discourses was the superordinated theme of a supportive, inclusive environment that prioritized student well-being. This was reflected in the use of positive language, personal pronouns, exclamatory phrases, hashtags, and emojis in the tweets, collectively emphasizing strong emotions and the criticality of empathy and adaptability in learning, especially during crises.

Contrastingly, the subordinated discourse revolved around traditional education models, which focused on curriculum delivery and academic success, often at the expense of students' well-being. This perspective, overshadowed by the predominant narrative of 'Empathetic Empowerment,' was implicitly challenged and largely absent from the main discourse. Additionally, discussions on disparities in educational access and resources during remote learning were not prominently featured but would be important to consider for a comprehensive understanding of the educational landscape during the pandemic.

This discourse highlighted the transformative potential of redefining educational practices through remote learning. It suggested a paradigm shift towards more adaptive, inclusive systems that prioritized student-centric values. However, this transformation faced constraints due to remote learning challenges, such as digital divide issues and increased pressures on parents and teachers. Understanding these dynamics is crucial to fully grasp the complexities and potential of educational conversations during the pandemic.

Tweet 4 – "Digital Community Building"

Kathi Kersznowski's (@kerzi) Tweet 4, with its significant engagement including 37 comments, over 450 likes, and 277 retweets, exemplified a robust "Digital Community Building" effort in the context of remote learning. These metrics not only reflected the tweet's reach but also its impact in fostering a sense of community among educators and EdTech companies. By advocating the use of the hashtag #RemoteLearning, Kersznowski encouraged resource sharing among educators, highlighting the critical role of social media in facilitating such exchanges. The discourse underscored the significance of digital platforms in creating supportive networks and collaboration among teachers and learners during the challenges posed by remote learning. Posted on March 6, 2020, this tweet represented one of the earliest discussions in this study, noted by Kersznowski's reference to potential school closures due to COVID-19, a situation that was not yet widespread in the United States at that time.

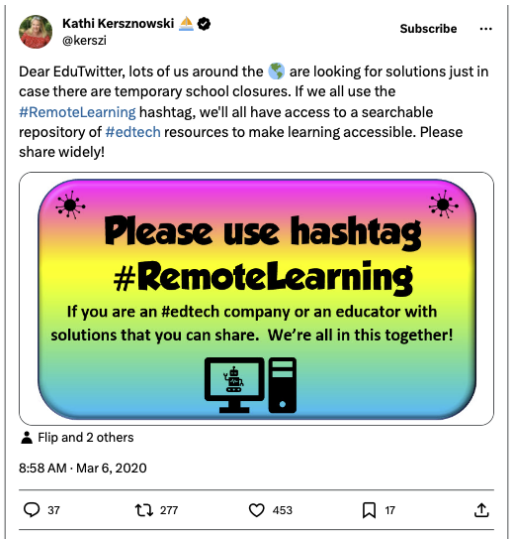
This dialogue revealed a deep sense of community among educators and EdTech stakeholders as they confronted the abrupt transition to remote learning. The emerging solidarity in these interactions showcased the collective educational spirit amidst the looming threat of school closures. The thread was characterized by active resource sharing, collaboration, and mutual support, with participants using #RemoteLearning to exchange resources, advice, and encouragement.

Kersznowski's Twitter profile portrayed her as an "edtech energizer, Co-Author of #SailThe7Cs, Global Presenter, Speaker, MIEExpert, Apple Coach, Google 1&2, Creator of #FlipHunt & #LearningInTheLoo (#PottyPD)" and boasted over 23,000 followers. Her personal website, Kerszi.com, featured links to her book, details on her speaking and consulting services, and access to her blog, articles, and videos on various edtech topics. This digital presence

reinforced Kersznowski's influence in the educational technology sphere and her active role in promoting innovative educational practices.

Figure 23

Tweet 4 from Kathi Kersznowski



Micro-Level Analysis of the Original Tweet. Kersznowski's tweet employed a striking graphic with a rainbow color scheme to capture attention amidst the busy Twitter feed. The use of COVID virus icons and a computer symbol in the image subtly hinted at the pandemic context and the focus on sharing technology resources for remote learning. The graphic featured bold, prominent text "Please use hashtag #RemoteLearning," effectively highlighting this key element. The tweet then proceeded in a smaller font, extending an invitation to edtech companies and educators to share solutions, reinforcing the communal aspect of addressing remote learning challenges. The reader's attention was directed first to this vivid image, then to the body of the tweet:

> Dear EduTwitter, lots of us around the 🌎 are looking for solutions just in case there are temporary school closures. If we all use the #RemoteLearning hashtag, we'll all have

access to a searchable repository of #edtech resources to make learning accessible. Please share widely!

Kersznowski's initial tweet was characterized by its simplicity and directness. The colloquial greeting "Dear EduTwitter" set a tone of camaraderie among educators, while the use of collective pronouns fostered a sense of shared experience. The concluding imperative, "Please share widely!" served as a call to action, emphasizing communal responsibility. The prominent use of hashtags like #RemoteLearning and #EdTech categorized the content and tied it into broader online conversations about remote learning. These hashtags created a digital community where educators convened to exchange knowledge.

Micro-Level Analysis of Comments and Replies. The replies and interactions with Kersznowski's tweet mirrored the informal, conversational tone typical of Twitter. The usage of first-person pronouns like "I," "we," and "us" reflected a personal touch and a sense of community among educators. The use of second-person pronouns "you" and "your" further personalized the interactions, fostering a direct connection between educators and edtech companies.

The discourse used positive language, including words like "thank," "help," "support," and "share" to promote a community spirit and mutual support. Imperative verbs such as "share" and "check out" reflected the action-oriented nature of the discourse, emphasizing urgency and communal engagement. Links to external resources, accompanied by brief descriptions, emphasized the practical, resource-sharing aspect of the discourse. Additionally, mentions of other Twitter users using the "@" symbol acknowledged individual contributions and wove them into a collective narrative of "Digital Community Building."

The responses, like Stacey Scheininger's and McLelland-Crawley's, continued this action-oriented, community-driven language. Their use of imperatives and positive sentiment contributed to a welcoming, collaborative environment. Lori London's metaphorical language in "Let's share the wealth" and Michelle Brummond's focused on preparedness further reinforce the theme of communal resource sharing.

Figure 24

Stacey Scheininger comment

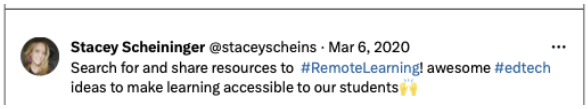


Figure 25

R. Mclelland-Crawley comment

Figure 26

Lori London comment

Figure 27

Michelle Brummond comment

This linguistic, grammatical, and rhetorical analysis of the original tweet and its subsequent interactions underscored a collaborative, community-driven approach to remote learning challenges. The informal greetings, collective pronouns, metaphorical language, and positive sentiment all contributed to a discourse characterized by shared responsibility and mutual support, pivotal in creating a dynamic, collaborative space. These linguistic elements highlighted collective agency and the importance of negotiated power relations in navigating remote learning during a pandemic, contributing to the overarching theme of "Digital Community Building."

Meso-Level Analysis of the Original Tweet. Kersznowski's original tweet portrayed remote learning as an essential and immediate response to the pandemic. This framing was crucial and legitimized the rapid shift to online education as well as establishing the foundations of community building and presenting remote learning as an emergent, collective response to an unprecedented situation. The tweet lay the groundwork for community building, presenting remote learning not just as a necessary adaptation, but also as an opportunity for collaborative innovation.

Meso-Level Analysis of Comments and Replies. Scheininger's comment, infused with imperative language, mirrored and amplified this sentiment. Such framing not only contextualized remote learning as a necessity but also as an avenue for collaborative adaptation and innovation, transforming a challenge into a potential opportunity. The discourse prominently featured personalization, a strategy that fosters a sense of connection and community. This was particularly evident in interactions where educators like Michelle Brummond shared specific tools and resources, directly engaging with their peers. The use of first-person pronouns and direct addresses through @ mentioning in these exchanges underlined the collaborative spirit, illustrating the collective effort in navigating the uncharted waters of remote learning.

Another discursive strategy employed in the tweet, comments, and replies was the delineation of in-group/out-group dynamics. The in-group, consisting of educators and EdTech companies actively engaged in remote learning, was marked by inclusive language such as "we" and "us." This was observed in R. McLelland-Crawley's reply, which employed an inviting tone, further reinforcing this dynamic. This inclusive language fostered “Digital Community Building,” drawing educators and EdTech companies into a cohesive digital learning community, while also defining the boundaries of this newly forged digital collective. The sharing of resources and advice amongst this group encouraged active participation in the remote learning community, while subtly excluding those not directly involved.

Macro-Level Analysis of the Original Tweet. In Kersznowski’s initial tweet, the macro-level analysis revealed a theme of resource sharing and collaboration pivotal during the early stages of the COVID-19 pandemic. This tweet set the tone for “Digital Community Building,” a vital resource for educators as they navigated the sudden shift to remote learning. Kersznowski's use of the hashtag #RemoteLearning became a focal point for gathering and

disseminating resources, effectively framing remote learning as an emergent, collective response to the pandemic. This approach not only legitimized the rapid transition to online education but also underscored the importance of community support in facing such unprecedented challenges.

Macro-Level Analysis of Comments and Replies. The responses to Kersznowski's tweet further developed and reinforced this theme of collaboration and community building. For instance, Kahoot!'s (@kahoot) acknowledgment and contribution echoed the sentiment of resource sharing, extending it beyond educational frameworks to a broader societal perspective on problem-solving during crises. Additionally, this post exemplified the contribution of edtech companies in the resource sharing community and reflected a shift toward collective action.

Figure 28

Kahoot! comment

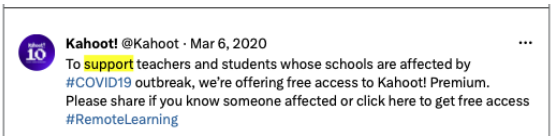


Figure 29

Loreen Sullivan shares resources

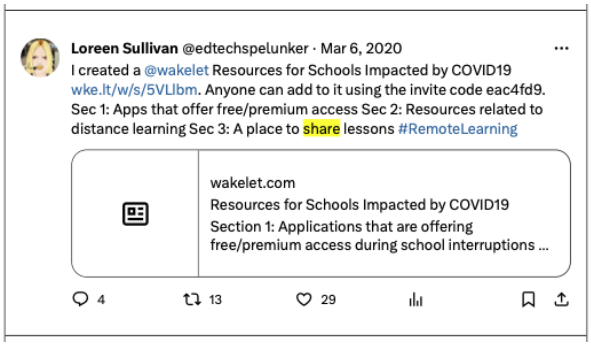
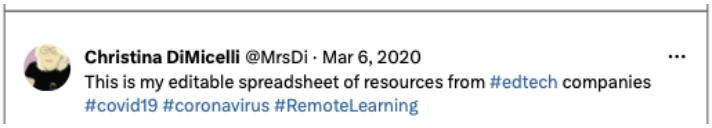


Figure 30

Christina DiMicelli shares resources



In other responses, such as Loreen Sullivan's (@edtechspelunker) creation of a Wakelet resource, the theme of swift adaptation and resilience mirrored the global response to the pandemic. Christina DiMicelli's (@MrsDi) contribution of an editable spreadsheet further aligned with broader issues of educational equity and the digital divide.

In all, the macro-level analysis of Tweet 4 encapsulated a critical moment in history where educators, EdTech companies, and communities collaborated to face an unprecedented challenge. The themes of collaboration, adaptation, accessibility, equity, and resilience emerging from this discourse were reflective not just of the educational sector's response but also of a broader societal and cultural adaptation to a rapidly changing global context. The discourse served as a testament to the power of collective effort and the potential of digital platforms in fostering community support and resource sharing during crises.

Synthesis and Interpretation. In terms of its relation to the theoretical frame of this study, this tweet and its surrounding discourses aligned closely with Vygotsky's (1960) social constructivism. This was evident in the ways that the learning community, including educators and edtech companies, collaboratively engaged in resource sharing, embodying a socially rooted process of learning and adaptation to remote learning environments. This collaborative effort demonstrated the dynamic nature of online learning spaces, where knowledge is not simply transmitted from one person to another but co-created through collective efforts. Additionally, the conversations surrounding this tweet suggested that educational transactions found in the efforts of edtech companies in providing free resources and in the educators' rapid adaption to

remote teaching methods reflected a concerted effort to mitigate the increased transactional distance created by the sudden shift to online learning necessitated by the pandemic. This proactive resource sharing aligned the narrative with Moore's (1997) theory.

Foucault's (1972) ideas on decentering could also be here in discussing the distinction between pandemic-era remote learning and traditional models. The type of learning that occurred during the pandemic was much more innovative and free-form compared to the more scripted, textbook-centric methods used previously. This new paradigm allowed educators and learners to collectively redefine and democratize the educational process through digital platforms. This change, brought about by the novelty the widespread adoption of remote learning during COVID, allowed teacher and learners to approach education much differently.

The dominant narrative that emerged within this discourse is one of educators and EdTech companies coming together to share resources and support each other in the face of sudden and unprecedented school closures. The tweets reflected an urgent need for solutions to facilitate remote learning, with a focus on accessibility and equity. The narrative also highlighted the prominent role of EdTech companies, who stepped up to offer free access to their resources and services.

The superordinated discourse in the tweets was one of resource sharing and collaboration, with the hashtag #RemoteLearning serving as a rallying point for educators to share resources, advice, and support. The role of EdTech companies was also superordinated, with many offering free access to their services or resources to support remote learning. The discourse also underscored the importance of making learning accessible to all students during school closures, with many tweets mentioning the need for resources to be free or low-cost. The subordinated discourse was the underlying uncertainty and anxiety surrounding the COVID-19 pandemic.

While the tweets were primarily focused on practical matters of remote learning, they also reflected educators' concerns about the potential impact of school closures on students' learning and their own ability to adapt to remote teaching. The excluded discourse could be the voices of students and parents, who were directly affected by the shift to remote learning but were not prominently featured in the tweets. Their experiences, challenges, and perspectives could provide valuable insights into the effectiveness and impact of remote learning.

The discourse surrounding Tweet 4 showcased transformative learning in terms of adopting new pedagogical approaches and adapting to digital platforms. Loreen Sullivan's (@edtechspeŽunker) tweet about creating resources for schools on @wakelet was an example of this adaptability. However, this transformative experience was constrained by challenges like the digital divide and varying levels of digital literacy. The discourse reflected both the opportunities and barriers inherent in the shift to remote learning.

Tweet 5 – "Empowering Educational Equity"

This analysis focused on discussions surrounding Tweet 5, which was an original tweet from Matt Miller (@jmattmiller) on March 30, 2020. Miller's tweet addressed the digital divide by providing a set of activities that students can engage in without internet access. It promoted the value of creativity and adaptability in teaching practices to address the challenges faced by students without online connectivity. By sharing these activities and others suggested in the comments and replies, the tweet fostered discussions on alternative learning methods and underscored the importance of catering to the diverse needs of all students. It exemplified a proactive stance towards educational equity, demonstrating how educators could make a difference by providing accessible learning opportunities regardless of technological constraints. The conversation encouraged reflection on the role of non-digital resources in promoting

equitable education. It had 26 comments, over 875 likes, and 606 retweets. Miller's post began with the question, "What can students do WITHOUT INTERNET during #remotelearning?" and included an infographic and a link to a corresponding blog article that included 10 suggested activities. The discourses surrounding the tweet included a discussion of the digital divide in education and began a litany of additional suggested learning activities for students who may not have had access to technology resources.

Miller had over 125,000 Twitter followers, and his biography identified him as a "HS Teacher. Author of 6 books. Textbook ditcher. GCI & MIEE. Blogger. Keynote & workshop speaker. Christ follower. Happy husband/dad of 3. Livin' the dream". Additionally, he ran a website called DitchThatTextbook.com, which contained a blog, resources related to Google and Microsoft education offerings, additional resources covering many topics, including current topics like AI for Educators. Miller's site additionally contained links to his books and consulting services.

As was the case with Morris' "MEGA Resource Guide" post, the associated article went into much more depth around each of the 10 activities he recommended for no-internet remote learning activities. For example, the section called "Be Still" stated:

> Be alone. Be quiet. Your brain will thank you. The research-backed benefits of solitude, according to Psychology Today: rebooting your brain, improved concentration, deep thought, and effective problem solving.
>
> So many students spend so much time tied to technology. They watch videos. Listen to music. Send messages with friends. Help them to create healthy habits. If they do, their brains will be more primed to learn.
>
> Limitations: None. Everyone can be still!

The discourse analysis of the tweets, comments, and the blog post stemming from Miller's original tweet revealed a dialogue revolving around the challenges and opportunities of remote learning, especially in situations where students lack reliable internet access. Many posts highlighted the stark reality of the digital divide and the lack of equitable technology access for all students. Comments from users like the one from Brian Brown, Ph.D. (@bbrownphd) drew attention to a significant portion of the U.S. population facing unreliable internet access. This discussion wasn't just about identifying a problem; it was a rallying cry, calling educators and policymakers to action to address the varying realities of students.

Figure 31

Tweet 5 from Matt Miller

Micro-Level Analysis of the Original Tweet. The original tweet by Miller employed specific educational and technological vocabulary, such as "remote learning" and "no-internet."

These terms anchored the tweet firmly in the context of the COVID-19 pandemic, reflecting the necessity of remote learning due to school closures. Additionally, Miller's use of active voice in phrases like "What can students do WITHOUT INTERNET during #remotelearning?" conveyed a proactive approach to addressing the challenges of remote learning. The infographic accompanying the tweet was visually striking with its use of gold and yellow highlights and a clear indication, through a laptop with a prohibition sign, that the activities suggested did not require internet access. The design, featuring bold and highlighted text, alongside simple icons for each activity, effectively communicated the key message and engaged the audience.

In the tweets and comments, the vocabulary contained many educational and technological terms, such as "remote learning," and "no-internet." These words reflected the context of the COVID-19 pandemic, where remote learning had become a necessity due to school closures. The use of hashtags such as #remotelearning, #distancelearning, and #onlinelearning further emphasized the centrality of these themes in the discourse.

Micro-Level Analysis of Replies and Comments. In the responses to Miller's tweet, the conversation expanded with similar educational and technological terms, maintaining the focus on remote learning in pandemic conditions. The comments continued the use of active voice grammar, suggesting agency among users in finding solutions for remote learning without internet access. Rhetorical devices in the replies and comments, such as questions Miller's own comment, "What can students do WITHOUT INTERNET during #remotelearning?" and imperative phrases in other posts, such as "read a book," "Follow a recipe," or "do passion projects," invited interaction and encouraged the sharing of ideas and advice. These rhetorical strategies fostered a sense of community and collaborative problem-solving among educators and others engaged in the conversation.

Figure 32

Matt Miller refers to the digital divide

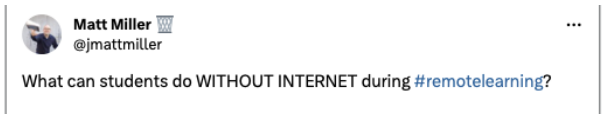


Figure 33

Comment from Renuka Senaratne

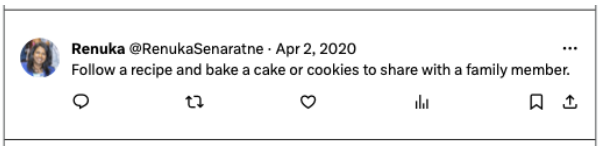
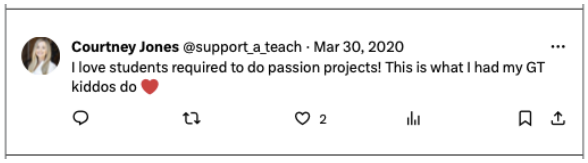


Figure 34

Comment from Dianne Fountain

Figure 35

Comment from Courtney Jones



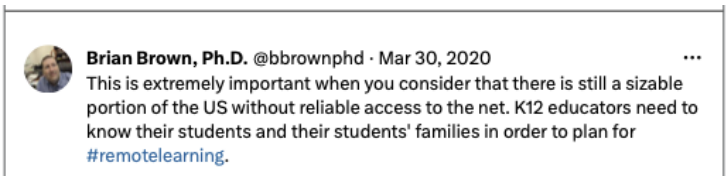
Overall, the linguistic features in both the original tweet and its subsequent interactions contributed to the themes of remote learning during the pandemic. The vocabulary, grammar, and rhetorical devices used reflected the challenges faced, such as the digital divide, and highlighted a collective, proactive stance towards overcoming these challenges. The infographic in the original tweet and the interactive nature of the comments worked together to foster a

collaborative digital environment where educators and stakeholders can share resources and support each other in navigating the complexities of remote learning in various contexts.

Meso-Level Analysis of the Original Tweet. Tweet 5, initiated by Matt Miller (@jmattmiller), demonstrated collaborative knowledge building and problem-solution strategies specifically aimed at addressing educational equity challenges during the pandemic. Miller's tweet set the stage for a dialogue focused on the unique difficulties of remote learning, particularly for those affected by the digital divide. This tweet acted as a catalyst, inviting educators and learners to contribute their insights, resulting in a diversity of solutions and perspectives. This exemplified a collective effort to navigate the unique challenges remote learning for those teaching students on the wrong side of the digital divide.

Figure 36

Comment from Brian Brown, Ph.D.



Meso-Level Analysis of Replies and Comments. The responses to Miller's tweet further developed the discourse on educational equity in the context of the COVID-19 pandemic. The replies framed remote learning as a significant challenge due to the digital divide, with contributors like Brian Brown highlighting the importance of recognizing varied student situations. This framing, as seen in Brown's and other replies, emphasized the critical issue of digital inequity in education, urging immediate action to find solutions. These contributions followed a problem-solution structure, where the initial tweet presented the challenge, and the ensuing responses offered a range of practical, innovative solutions. This discourse format encouraged a proactive, solution-oriented discussion.

The combined contributions from Miller's tweet and the subsequent participants painted a picture of resilience and innovation among educators. The narrative construction lent credibility to the dialogue and situates it within the broader context of educational adaptation amid the pandemic. These discussions underscored empowerment and agency and portray educators and learners as active participants in creating the field of remote learning. Overall, the conversation highlighted the dynamic and collaborative nature of the discourse, showcasing the educational community's responsiveness and engagement in addressing the challenges of remote learning through low-tech or high-tech learning activities among educators, a sentiment particularly salient during the COVID-19 crisis.

Macro-Level Analysis of the Original Tweets. The original tweet in this online conversation powerfully underscored the stark reality of the digital divide, illustrating the challenges many students face with insufficient internet access or lack of devices for remote learning. These tweets brought to the forefront the critical need to bridge this divide, underlining the importance of providing inclusive and equitable quality education for all. This theme also raised questions about the role of socio-economic factors in access to education during a pandemic and shed light on deep-rooted structural issues within the education system.

Macro-Level Analysis of Replies and Comments. The replies and comments in this thread further elaborated on this theme by showcasing a variety of innovative, low-tech, or no-tech remote learning activities. These suggestions, ranging from reading, teaching others, engaging in passion projects, learning new skills, to reflective practices and stillness, demonstrated the vast potential for creativity and innovation in teaching and learning practices, especially in challenging circumstances. These activities reflected a broader pedagogical shift towards more diverse learning experiences, accommodating varied learner needs and contexts.

The discourse across both the original tweet and the comments emphasized the pivotal role of teachers and educators in driving remote learning. They were portrayed as crucial support systems, guiding and adapting to the evolving educational landscape amidst the challenges of the digital divide. This conversation echoed a deeper discourse on the evolving role of teachers in the 21st century, transitioning from traditional roles of knowledge transmission to becoming facilitators of learning, mentors, and lifelong learners themselves In sum, the macro-level analysis of the tweet and its responses revealed an engaged educational community actively addressing the realities of remote learning. This discourse not only showcased practical solutions to immediate challenges but also reflected on the transformative changes in teaching and learning practices, emphasizing the adaptability and innovation required in educators to meet the demands of the current time.

Synthesis and Interpretation. The COVID-19 pandemic brought about a significant shift in the education landscape, with remote learning first becoming a necessity due to school closures, then an alternative to shorter-term school closures due to weather or other obstacles to in-person instruction. The dominant narrative that emerged from the discourse in the tweets, blog article, and comments surrounding this tweet was that of the digital divide and the lack of equitable technology access for all students. This narrative was dominant because it addressed a critical issue that had been highlighted by the shift to remote learning - not all students have the resources or the opportunity to participate in online learning. In terms of the theories central to the present study, Vygotsky's (1960) social constructivism might emphasize the importance of equitable access to collaborative and interactive learning experiences, which would be hindered by the digital divide. Additionally, transactional distance theory (Moore, 1997) would frame the

digital divide as an exacerbating factor in the "transactional distance" between learners and educators, making the need for innovation and adaptation even more necessary.

The superordinated learning discourse in this context was that of adaptation and innovation in teaching and learning practices. The discourse brought forth a range of innovative, low-tech or no-tech remote learning activities that could be pursued without internet access. This discourse presented solutions to the challenge of remote learning without internet access and emphasized the potential for creativity and innovation in teaching-learning practices during challenging times. In response to the social constructivist (Vygotsky, 1960) idea that the digital divide impedes interactive learning, this particular discourse could have been seen as a constructive response to these challenges through promoting low-tech or no-tech solutions to ensure continuity. A subordinated learning discourse was that of the value of non-academic skills. While the discourse did highlight the importance of developing non-academic skills such as kindness, empathy, creativity, curiosity, resilience, and self-direction, these aspects were often overshadowed by the focus on academic learning and the use of technology in remote learning.

Excluded from the discourse was the issue of socio-economic disparities and their impact on remote learning. While the digital divide was acknowledged, the discourse did not delve into the socio-economic factors that contributed to this divide. For instance, the discourse did not address the challenges faced by students from low-income families, who may not only have lacked internet access but also faced other barriers to remote learning such as lack of a conducive learning environment at home or lack of parental support. Conversations around how the digital divide both reflects and perpetuates socioeconomic disparities brought light to the power relations at play in the discourse.

The transformative learning enabled by the discourse was the shift towards more flexible and diversified learning experiences that catered to different learning needs and contexts. The discourse suggested various low-tech or no-tech remote learning activities, encouraged independent reading, promoted the development of non-academic skills, and emphasized the importance of social interaction and community engagement in learning. These suggestions have the potential to transform traditional teaching-learning practices and make learning more inclusive, engaging, and meaningful for students. However, this transformative learning was constrained by the digital divide and the lack of equitable technology access for all students. Despite the innovative suggestions for remote learning without internet access, the reality is that many students still face significant barriers to remote learning due to lack of resources. This highlights the need for systemic solutions to address the digital divide and ensure equitable access to education for all students.

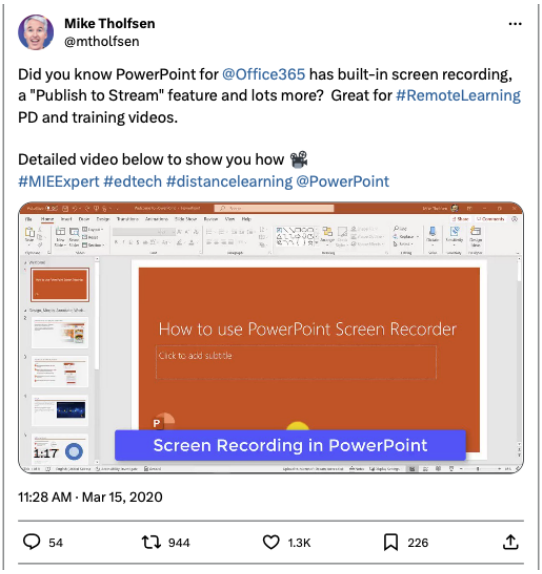
Tweet 6 – "Technology as an Education Enabler"

The theme for this tweet advocated for leveraging technology as a means to enhance learning experiences. Mike Tholfsen's initial tweet served as a catalyst for discussions on the transformative potential of digital tools in education, bringing attention to specific features of PowerPoint and Office 365 that facilitate remote learning. By showcasing the capabilities of these technological resources, the discussion emphasized their role in empowering educators and students to engage in dynamic and interactive learning experiences remotely. It prompted reflection on the integration of technology into teaching and learning and the opportunities it presents for innovation in education practices. The tweet was originally posted by Tholfsen on March 15, 2020, and had over 1,300 likes, 54 comments, and 944 retweets.

Tholfsen's Twitter profile revealed that he is a "Group Product Manager on the #MicrosoftEDU team," and included a YouTube channel, https://youtube.com/miketholfsen, where he posted instructional videos for the Microsoft Office applications. Additionally, his Twitter profile stated, "building AI in EDU, Learning Accelerators, #MicrosoftTeams, Immersive Reader, #OneNote Class Notebooks, #edtech". Several of these titles and hashtags solidified Tholfsen's association with Microsoft. Tholfsen had over 63,000 followers on Twitter, and over 143,000 subscribers on YouTube.

Figure 37

Tweet 6 from Mike Tholfsen



Micro-Level Analysis of the Original Tweet. The original tweet by Tholfsen was marked by a specialized vocabulary specific to technology and education. Terms like "PowerPoint," "Office 365," "remote learning," "screen recording," and "Publish to Stream" were prominent, situating the discourse firmly within the realm of digital educational resources. This use of specialized language not only conveyed essential information but also established Tholfsen's expertise in digital educational tools. The language shaped a narrative where technology is a key facilitator of education during the pandemic.

The video in Tholfsen's tweet, lasting one minute and 43 seconds, demonstrated using PowerPoint for a product demonstration on the Microsoft EDU website. The video effectively showcased the "Publish to Stream" function, illustrating how to integrate this tool into PowerPoint presentations and publish them on Microsoft Stream. This visual element complemented the tweet's textual content, offering a practical demonstration of the technology discussed and further cementing Tholfsen's role as a digital education resource expert.

Figure 38

Technical question from Matt Parker

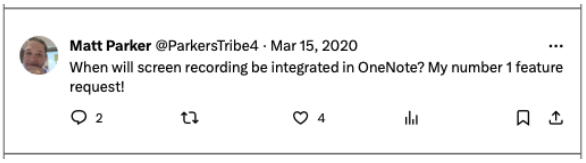


Figure 39

Michelle Budge question with Tholfsen reply

Micro-Level Analysis of Replies and Comments. The responses from users like Matt Parker and Michelle Budge extended this technological discourse. Their questions and comments reflected the educational community's evolving language in adapting to new tech methods, showcasing the practical application of these tools in education. This ongoing dialogue about integrating technology into teaching practices enhanced the understanding of how these tools could be utilized effectively.

The grammar across these interactions was predominantly informal and conversational, typical of social media exchanges. This approachability bridged expert knowledge with everyday

educational practices. The frequent use of the second person ("you") created a sense of direct engagement between the tweet's author and the readers, fostering community and active participation. The use of present tense added to the immediacy of the discourse, with Tholfsen's responsive tweets to users like Rich Violanti and Svanstraten, and Brook Spaulding's proactive comments, embodying a dynamic, collaborative spirit among educators.

Figure 40

Rich Violante comment

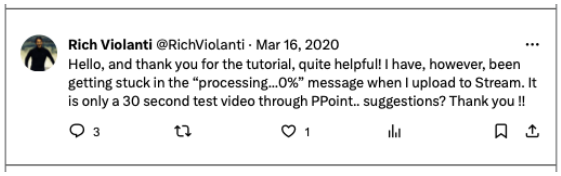


Figure 41

Svanstraten comment with reply

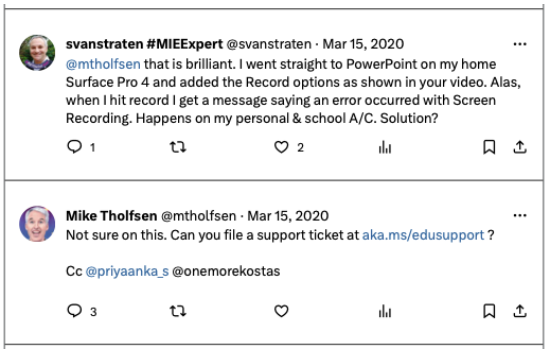


Figure 42

Comment from Ng Wai Ying, Winnie

Figure 43

Question from Tony P-K

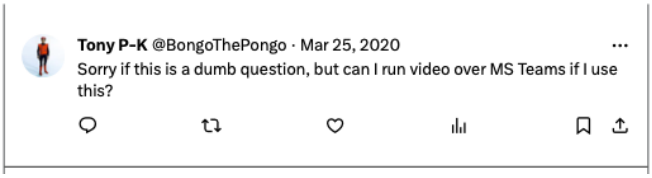


Figure 44

Tholfsen's literary devices

Figure 45

Comment and share from Sallee Clark

Various rhetorical strategies were employed in the tweets to amplify the message. Questions like "Did you know...?", in the original tweet, engaged the audience, while exclamatory phrases like "Incredible!" conveyed enthusiasm for technology in remote learning. Hyperlinks acted as calls to action, directing readers to further resources. Interrogative sentences by users such as Tony P-K injected excitement about tech possibilities, and Sallee Clark's direct address and hashtags broadened the conversation's reach. Other comments addressed systemic challenges in tech adoption, discussing practical obstacles and collective solutions.

Meso-Level Analysis of the Original Tweet. In Tweet 6, Mike Tholfsen initiated a dialogue that spotlighted the significance of Microsoft PowerPoint and Office 365 in remote

learning. His tweet set the stage, emphasizing these tools' vital role in the educational process during the pandemic. This established a framework that positioned technology as a key enabler in education, creating a positive narrative around its utility and necessity.

Meso-Level Analysis of Replies and Comments. The responses to Tholfsen's tweet delved into systemic barriers and the practicalities of technology adoption. Joe B's questions about Microsoft Stream access, along with technical queries from Rich Violanti and Svanstraten, spotlighted real-world challenges educators face. These inquiries underscored the need for broader institutional support and clear policy guidance for effective technology integration in educational settings.

Figure 46

Comment and questions from Melanie LeJeune

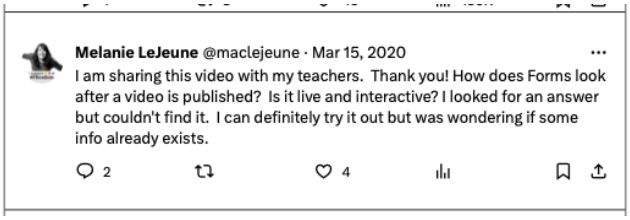


Figure 47

Share from Miss Carpenter

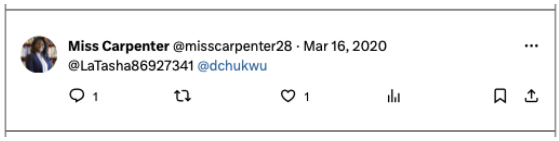


Figure 48

T'Challa Greaves shares Tholfsen's tweet

Melanie LeJeune's interactions, seeking to fully grasp and utilize these tools, further reinforced the narrative of technology's importance in remote education. Their dialogue collectively built a positive perspective on technology, affirming its indispensable role in contemporary education. The discourse revealed a strong emphasis on collaboration and resource sharing. Users like Miss Carpenter and T'Challa Greaves tagging peers exemplified a communal approach to overcoming remote learning challenges.

Figure 49

Comment from Ole J Devik

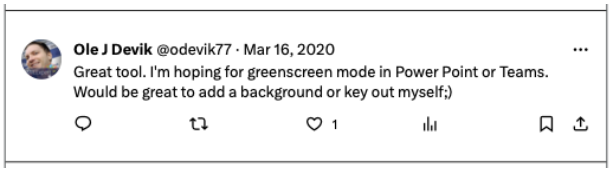


Figure 50

Comment and question from Mariana S (The Reader)

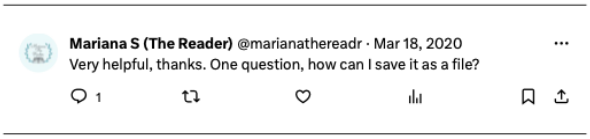


Figure 51

Comment from Brittnie Hebnes

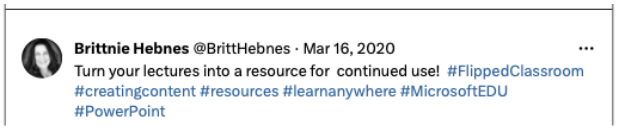


Figure 52

Comment from Megan Townes

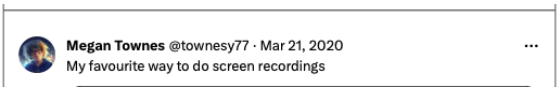


Figure 53

Comment from Maria Behncke

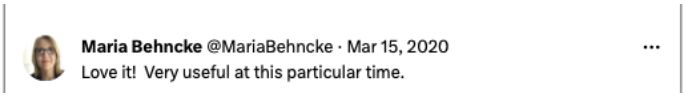
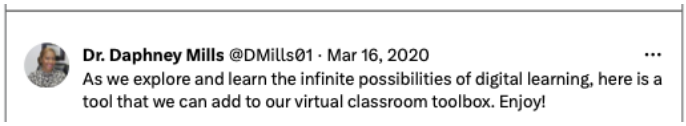


Figure 54

Comment from Dr. Daphney Mills



Personal anecdotes, such as those shared by Ole J Devik, added a layer of relatability and engagement to the technological discussion. This personal touch made the conversation more relevant and appealing to daily educational practices. Additionally, the strategic use of questions by Mariana S and others to inquire about specific technical aspects fostered a more interactive discourse. Additionally, user contributions of experiences and best practices, like those from Brittnie Hebnes and Megan Townes, formed a pool of communal knowledge. Hebnes' insights on transforming lectures into ongoing resources illustrated the process of communal learning and adaptability. Lastly, the overall positive outlook and recognition of the potential of remote learning were highlighted in comments from users like Maria Behncke and Dr. Daphney Mills. These comments contributed to a narrative of optimism, signaling a forward-looking approach towards the integration of digital tools in education.

Macro-Level Analysis of the Original Tweet. The first significant theme in this macro-level analysis of the discourse was the role of technology as a facilitator of remote learning. Tweets from Mike Tholfsen, a Microsoft representative, shed light on how PowerPoint and Office 365 features supported remote learning endeavors. This theme resonated in the responses of educators, who expressed enthusiasm about these features and their potential to enhance

remote learning. The conversation placed technology as a crucial tool in transitioning to remote learning, portraying it as a key solution to the educational challenges brought on by the pandemic.

Macro-Level Analysis of Replies and Comments. The second grand discursive theme was the inevitability of challenges and troubleshooting associated with technology use. Several tweets involved users experiencing difficulties with the features being promoted, with Tholfsen and others providing support and solutions. This discourse highlighted the complexities of using technology for remote learning and the need for ongoing support to ensure its effective use.

The sharing of resources and collaboration among educators was still another theme within this discursive thread. Many tweets involved educators expressing their intention to share the information with their colleagues or @ tagging specific individuals to draw their attention to the resources. This discourse underscored the collaborative nature of the educational community and the shared commitment to navigating the shift to remote learning.

A final discursive theme related to the broader societal context of the shift to remote learning. Several tweets touched on the need for districts to "open up" Microsoft Stream to their educators, hinting at the systemic and policy-level decisions impacting the implementation of remote learning. This discourse drew attention to the broader institutional and societal structures shaping the remote learning experience.

Synthesis and Interpretation. The dominant narrative that emerged from the discourse was the shift to a remote learning model characterized by the use of technology. The thread characterized Microsoft PowerPoint and Office 365 as essential tools for facilitating remote learning, and highlighted features of these tools, such as screen recording and the ability to publish to stream. This dominant narrative of leveraging technology for education echoed

Vygotsky's (1960) assertion that knowledge construction is not a solitary activity but arises from collaborative interactions.

Particular narratives included the challenges faced by educators in implementing these technologies and the troubleshooting solutions provided. There was also a narrative regarding the need for systemic changes, such as districts opening Microsoft Stream to their educators. In this regard, Moore's (1997) transactional distance theory emphasizes the 'distance' that technology seeks to bridge by offering insights into the challenges of remote learning. Yet another particular narrative was the positive outlook towards the potential of remote learning, indicating a sense of resilience and adaptability among educators.

A superordinated discourse was the use of technology for remote learning. This was evident in the promotion of PowerPoint and Office 365 features, as well as the discussions around their effective implementation. In contrast, the challenges and troubleshooting associated with the use of these technologies represented a subordinated discourse. While these issues were addressed, they were often secondary to the promotion of the technologies themselves. The exclusion of perspectives of those who may not have had access to these technologies or those who preferred traditional teaching methods was both expected and notable. The discourse largely assumed access to and familiarity with these technologies, potentially excluding those who did not have these resources or skills.

The discussion highlighted the power dynamics inherent in the discourse of remote learning, where technology is a critical tool that influences knowledge and power relations. The promotion of specific technologies over others and the focus on their implementation could be seen as asserting a dominant discourse that could have potentially hindered some alternative educational practices, along with those who may not have had access to the same technologies.

The discourse enabled transformative learning by promoting the use of technology for remote learning and providing resources to facilitate this shift. The collaborative nature of the discussions, with educators sharing resources and experiences, also fostered a learning community that could support transformative learning. In contrast, the discourse may also have constrained transformative learning by focusing predominantly on technological solutions. This could potentially have limited discussions around other aspects of remote learning, such as pedagogical strategies, student engagement, and mental health. The discourse's focus on specific technologies may have also excluded those who do not have access to these tools or preferred other platforms or methods.

Thematic Examination of a Broader Tweet Sample

Through tweets, educators, edtech professionals, and others navigating the unprecedented educational challenges of the COVID-19 pandemic told a story rich in emotional resonance and transformative insights. This section aims to more broadly explore those digital dialogues to uncover and examine the recurring formations that thread through these online conversations. In this expanded, thematic analysis of 18 additional tweets, I broadened the examination of the discursive themes called out in the critical discourse analysis of the initial 6 tweets at the start of this chapter. The intent of this section was to validate that the expanded universe of tweets echoed the discursive formations identified in the previous sample and to provide further discussion and color around these themes.

This extended analysis provides additional insights from Mike Tholfsen, one of the original six authors, were revealed to show not only his contribution to shared resources during the pandemic, but also his promotion of a specific technology platform, a theme that was echoed in the tweets of other authors. Additionally, writing from another frequent voice, Brad

Weinstein, was examined to add more support for the theme of well-being. Still another user, Eric Sheninger, tweeted about both well-being and equity in his posts. The inclusion of these repeated tweets by some authors not only deepened understanding of the initial themes but also brought continuity and expansion to the discourse.

The themes explored included resource sharing, teacher and student well-being, equity and the digital divide, the influence of major technology companies, and the power of community support. These were interwoven into these additional tweet threads and the original six conversations, emphasizing their importance as salient topics during pandemic-era remote teaching and learning. This mirrored the collective effort to navigate these unprecedented challenges with optimism and solidarity.

Theme 1 – Resource Sharing

Figure 55

Tweet 2 from Kathleen Morris

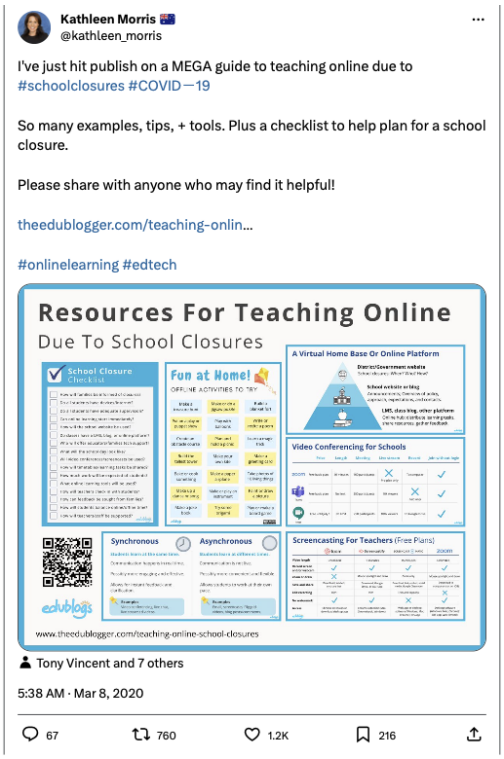
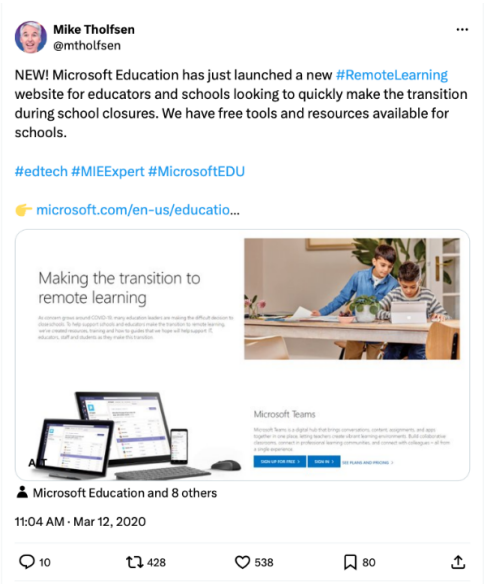


Figure 56

Tweet 4 from Kathi Kersznowski

Figure 57

A second tweet from Mike Tholfsen about resource sharing



In the realm of remote learning, the discourse on resource sharing was one of the most prominent themes, revealing an environment of community support and collaboration. Morris's tweet of a comprehensive guide to online teaching exemplified this and echoed a wider spirit that energized educational communities during the pandemic. Kersznowski's use of social media to

create a searchable repository of resources further illustrated this adaptability and community-building drive during those early, uncertain days. Additionally, a second tweet from Mike Tholfsen announced Microsoft Education's #RemoteLearning website to highlight the collaborative efforts between educators and technology providers. This initiative and similar ones from other technology companies provided essential support, offering free tools and resources to aid educators and schools in transitioning to online learning.

Figure 58

A tweet from Jamie Clark sharing Apple learning tools

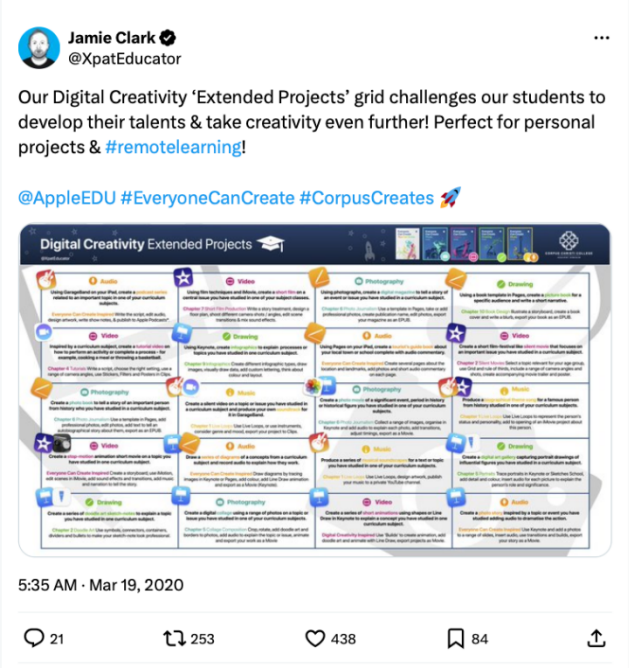
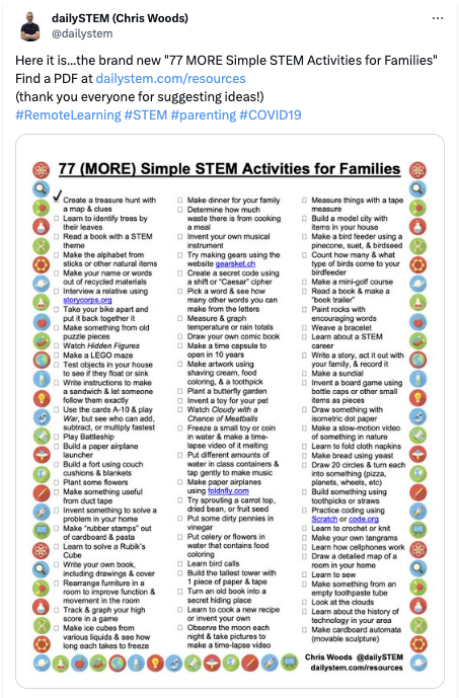


Figure 59

A tweet from Chris Woods sharing STEM activities



Jamie Clark's Digital Creativity grid exemplified resource sharing as a creative response to teaching challenges. This grid, accessible via Dropbox, reflected the ingenuity and adaptability educators displayed in ensuring learning continuity. Similarly, Chris Woods expanded learning beyond the classroom with his "77 MORE Simple STEM Activities for Families." This resource offered a collection of science, technology, engineering, and math activities, many of them requiring little in the way of student-owned technology to complete.

Figure 60

Jake Miller shares Zoom best practices

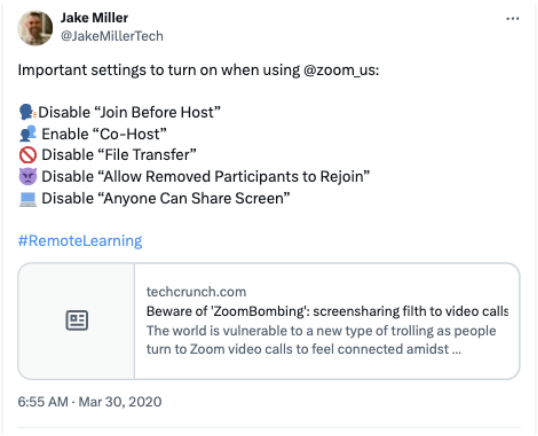


Figure 61

Tholfsen shares Teams best practices

Figure 62

Billy Krakower shares Google Meet best practices

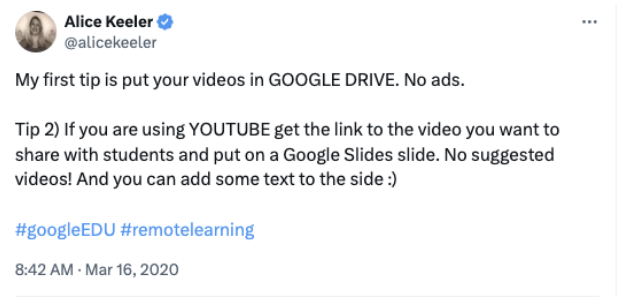
Online videoconferencing was at the forefront of remote teaching and learning during COVID-19 school closures, with several prominent tools emerging to provide schools with this functionality. Billy Krakower's Google Meet/Hangout Etiquette Guide offered practical solutions for online meetings, illustrating the resourcefulness of educators in adapting to new teaching modalities. Similarly, Jake Miller's tweet provided crucial tips for secure and effective Zoom usage, addressing concerns of online safety in remote learning environments. Yet another tweet by Mike Tholfsen further demonstrated resource sharing through a tutorial on managing online classrooms with Microsoft Teams, emphasizing the need for digital proficiency.

Figure 63

Esther Park shares Google EDU resources

Figure 64

Alice Keeler shares helpful tips for YouTube videos



In addition to the collections of resources shared by teachers and technologists, individual contributions resonated across the community, with encouragement from commenters for this type of sharing. Esther Park's posting of a Google Slides template with hyperlinked activities reflected the commitment of teachers to creating engaging remote learning experiences using the resources available to them. In a similar tweet, Alice Keeler suggested teachers use Google Drive for hosting ad-free videos to showcase an innovative use of digital tools to enhance remote learning experiences. Each of these examples illustrated the diverse aspects of the resource-sharing ecosystem that emerged during the pandemic.

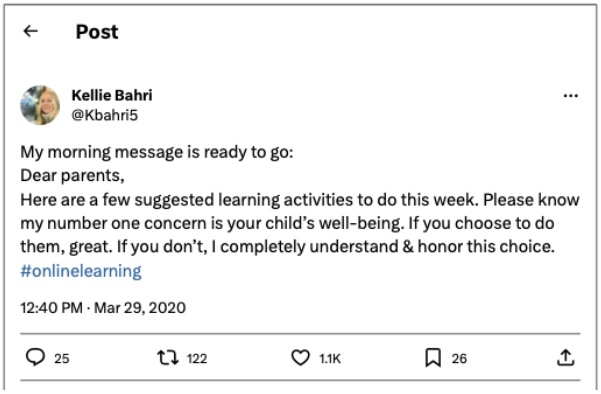
The discursive theme of resource sharing was represented in two thirds of the tweets analyzed and had significant overlap with each of the other themes discussed here. While equity, community building, teacher and student well-being, and technological innovation were all pivotal during this transformative era in education, the common bond among those in the education arena during this time was that of the sharing of resources. The tweets shown here, and many others, demonstrated how educators, technology providers, and the wider educational community came together to ensure continuity in learning through the pooling of instructional resources, to bridge gaps caused by school closures, and to lay the groundwork for a more resilient and inclusive educational future.

Theme 2 – Teacher and Student Well-Being

The COVID-19 pandemic was marked by uncertainty and rapid shifts in educational paradigms. Naturally, this brought to the forefront the critical theme of well-being for both teachers and students. The insights gleaned from various tweets, comments, and replies during this time provided a story of experiences that underscored the challenges and adaptations in the realm of teacher and student well-being.

Figure 65

Tweet 3 from Kellie Bahri sets the tone of well-being



Tweet 3, posted by Kellie Bahri, underscored the necessity of prioritizing students' emotional needs along with the continuity of academic success in the remote learning environment. It reflected a critical shift towards focusing on the mental and emotional well-being of students, a sentiment that echoed deeply among educators. This perspective highlighted the nurturing role that teachers have embraced, where their commitment to student welfare is intrinsic to their own emotional and professional journeys. This was especially prevalent during the challenging period of COVID-19.

Figure 66

The Sweet Spot from Dr. Alec Couros

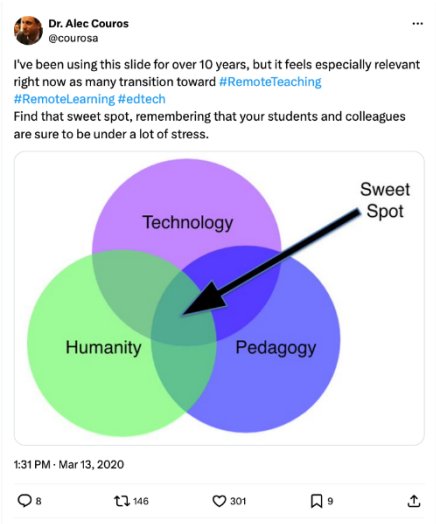
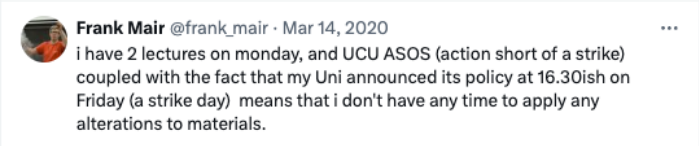


Figure 67

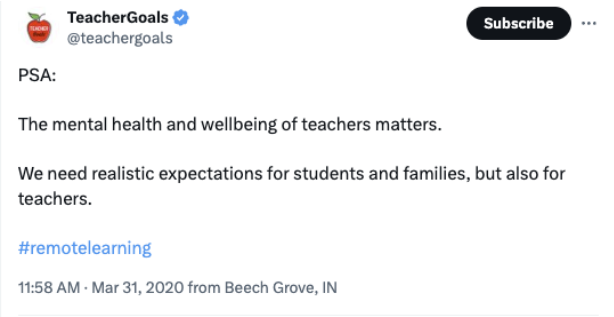
Frank Mair expresses frustration in higher ed



A theme that paralleled the well-being of students was the emotional labor and stress experienced by educators. Dr. Alec Couros, in his tweet, emphasized the importance of empathy in remote learning, recognizing the stress faced by students and colleagues. This highlighted the necessity for educators to be sensitive to the emotional state of their learners, but also to the mental health and well-being needs of other educators, including parents who were for the first time teaching, fostering an environment of understanding and support for all. Frank Mair's comment showed that the challenges educators faced in adapting to new teaching methods under tight deadlines and changing policies also resonated at the university environment and highlights the emotional and professional strain experienced by all teachers during this period. These examples reflected the heightened emotional demands placed on educators as they navigated the complex terrain of remote teaching.

Figure 68

TeacherGoals on well-being



Another related theme was the adaptation and resilience shown by the educational community. This tweet by TeacherGoals emphasized the importance of considering teachers'

mental health and setting realistic expectations in remote learning environments. This acknowledged the need for balance in the workload and emotional support for educators, reinforcing the theme of resilience and adaptability in the face of unprecedented challenges.

Figure 69

Brad Weinstein before you assign checklist

Figure 70

Brad Weinstein give everyone a break

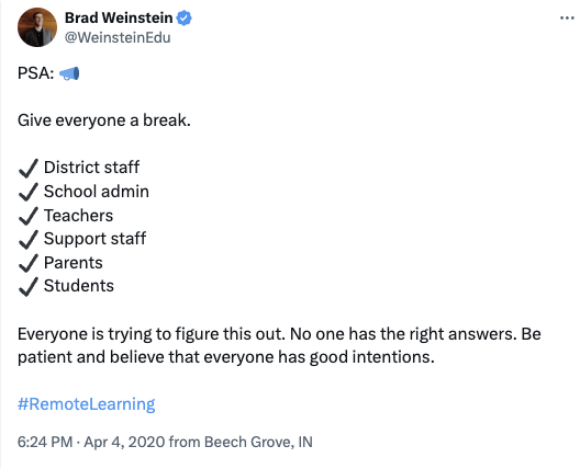


Figure 71

Eric Sheninger self-care graphic

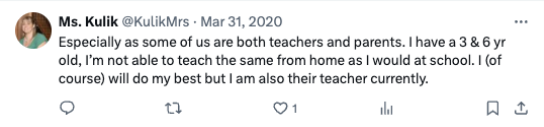
The well-being of students also emerged as a crucial concern in two tweets by the same author. Brad Weinstein raised important questions about the nature of assignments in remote learning, focusing on independence, equity, retention, and time management. This reflected a concern for the practical and emotional burdens placed on students in the home learning environment and focused on the need for educational practices that were empathetic to the students' circumstances. A second tweet from Weinstein called out the need to “give everyone a break,” indicating that all stakeholders experienced heightened levels of stress and uncertainty during the COVID pandemic. Yet another tweet from Eric Sheninger described the many ways in which self-care presents itself, reminding everyone that emotional health is a universal and multifaceted need.

Figure 72

MissSeñorita comment

Figure 73

Ms. Kulik comment on teaching and parenting



The appreciation expressed by MissSeñorita for her principal's understanding in managing expectations about remote learning acknowledged the impracticality of replicating classroom experiences, thus reducing undue stress on teachers. This, along with Ms. Kulik's experience of balancing teaching and caregiving responsibilities, illuminated the dual roles many educators had to navigate, adding to their stress and impacting their teaching effectiveness.

It became evident through these insights that the pandemic not only reshaped the educational landscape but also brought to light the critical importance of emotional well-being in education. The examples from these tweets demonstrated the emotional labor, the need for adaptability, the importance of empathy and understanding, and the value of supportive networks in navigating the challenges of remote learning. These insights underscored a paradigm shift in educational priorities, where the well-being of teachers and students was as paramount as academic achievements.

Theme 3 – Equity

At the heart of this study's exploration of remote learning during the COVID-19 pandemic was the imperative of educational equity, which was vividly underscored in Matt

Miller's foundational tweet. The tweet cast a stark light on the digital divide, provoking a critical inquiry: “What can students do WITHOUT INTERNET during #remotelearning?” This question, far from rhetorical, struck at the core of disparities shaping the educational landscape – an environment where digital access was not a luxury but a necessity for learning continuity. This theme was further exemplified by Brad Weinstein's critical reflection on the assignment of tasks, as highlighted in the tweet shown below. Weinstein's tweet served as a checklist for educators to assess the equity of their instructional design, questioning whether students could complete tasks independently, have agency in their learning, and were likely to retain the information. The tweet encapsulated a shift towards equity, advocating for teaching strategies that recognized and accommodated the diverse circumstances of students.

Figure 74

Brad Weinstein checklist

Figure 75

Matt Miller's equity post

Figure 76

A Spanish version of Chris Woods' list of STEM activities

Figure 77

Chris Woods' second list of 77 STEM activities

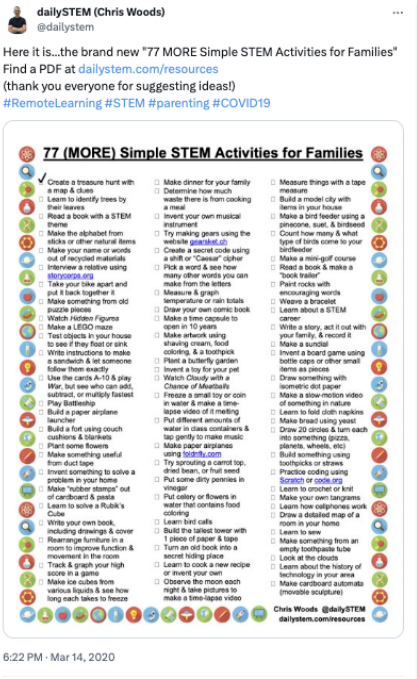


Figure 78

Chris Woods comment regarding Spanish version of his second list

Figure 79

Eric Sheninger non-digital activities

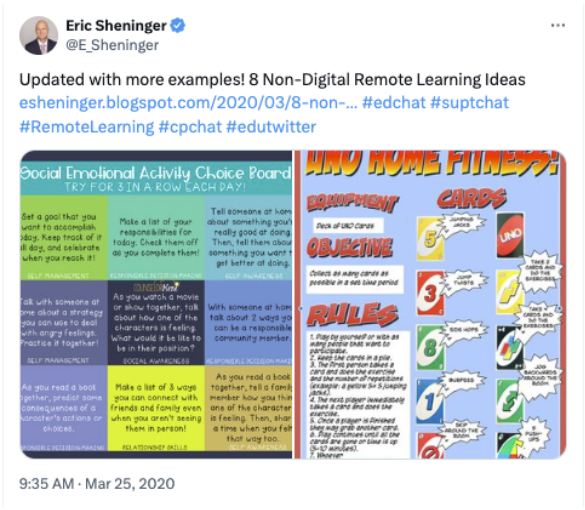
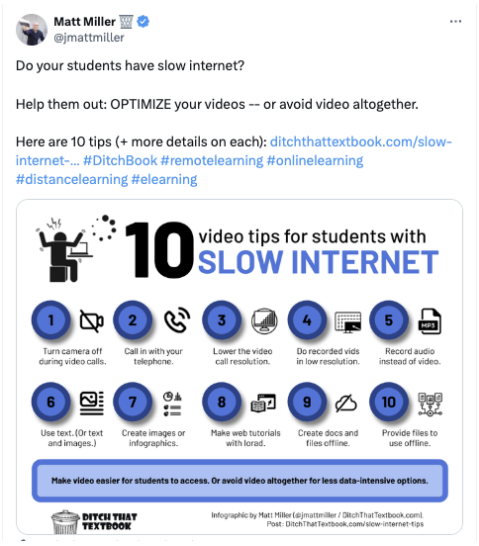


Figure 80

AgoraIO transitioned a million students to online classrooms

Figure 81

Related Matt Miller post for students with slow internet



Further, Chris Woods (@dailystem) amplified this theme of equity by creating and disseminating accessible STEM resources. Woods' initiative to provide "77 MORE Simple STEM Activities for Families" and the subsequent release of a Spanish version of an earlier-created list exemplified efforts to dismantle barriers to instructional resources. This move not only addressed language accessibility but also supported families in engaging with their children's learning, bridging gaps exacerbated by the pandemic.

Additional tweets from Miller, and others expanded his “no Internet” post to students with “slow Internet” connectivity, which alluded to the fact that the digital divide is nuanced and includes many factors, including connectivity, access to devices, digital literacy, and many environmental factors that could influence a student’s ability to participate in traditional online learning. Another post from Eric Sheninger provided further non-digital activities for students, and a tweet from Agora (@AgoraIO) discussed how they collaborated with another EdTech entity to transition over a million students to online learning in a seven-day period. This highlighted the efforts of EdTech and Technology companies over the course of the pandemic, as they provided services to assist in the continuation of learning, often at no cost to schools or students.

These examples were emblematic of the broader efforts within the education community to ensure that remote learning did not perpetuate or exacerbate existing disparities but instead became a conduit for innovative and equitable educational practices. The narrative created through these tweets underlined the critical role of educators and educational technology companies in this era as they collaborated in sharing resources and supporting one another. This collaborative spirit was not just about bridging the digital divide but also about fostering a

learning environment that was adaptable, inclusive, and reflective of our shared commitment to educational equity.

By looking deeper into the equity discourse, my goal was to shed light on the path forward - a road that requires persistent dedication to ensuring equitable access to technology and resources. This journey was about more than just overcoming current challenges. It was about laying the groundwork for an education system that, when faced with change and adversity, responded with creativity, empathy, and a dedication to educational equity.

Theme 4 – Technology Tools and Platforms

Through the evolution of remote learning, technology tools and platforms have played a pivotal role, which was vividly illustrated by the discourse in the tweets included in this section. The company where I worked during the pandemic, VMware, provided remote learning solutions that enabled access to educational resources from any device, anywhere. The demand for this suite of products increased exponentially during the pandemic, and the company was able to help many schools and universities make the transition to teaching and learning remotely. Some examples of other companies who made their own contributions during the pandemic are included within this section.

Jamie Clark's tweet highlighted Apple’s role in extending digital creativity through offering an innovative toolkit of technology tools that work across their devices that educators could use to support engaging learning experiences. These tools emphasized the seamless integration of creativity and technology, allowing for personalized and interactive educational content. Simultaneously, Google's suite, as reflected in other tweets, including Google Slides, YouTube, and Google Drive, became instrumental in creating, sharing, and storing educational content. Google Slides allowed educators to develop interactive presentations with hyperlinked

activities, while YouTube served as a vast repository for videos that supported teaching and learning. Google Drive provided a central platform for content storage and sharing, simplifying the digital content creation and distribution process. The use of these tools was showcased in the tweets from Alice Keeler and Esther Park. Additionally, Microsoft's contribution, showcased in Mike Tholfsen's tweet about a new remote learning website, offered a comprehensive set of tools to aid online education using a different platform, Office 365. These initiatives were a testament to technology companies' commitment to supporting education by providing educators with resources to facilitate online learning from content creation to student engagement.

Figure 82

Jamie Clark's list of Apple learning tools

Figure 83

Lee Araoz shares a set of Google Classroom activities

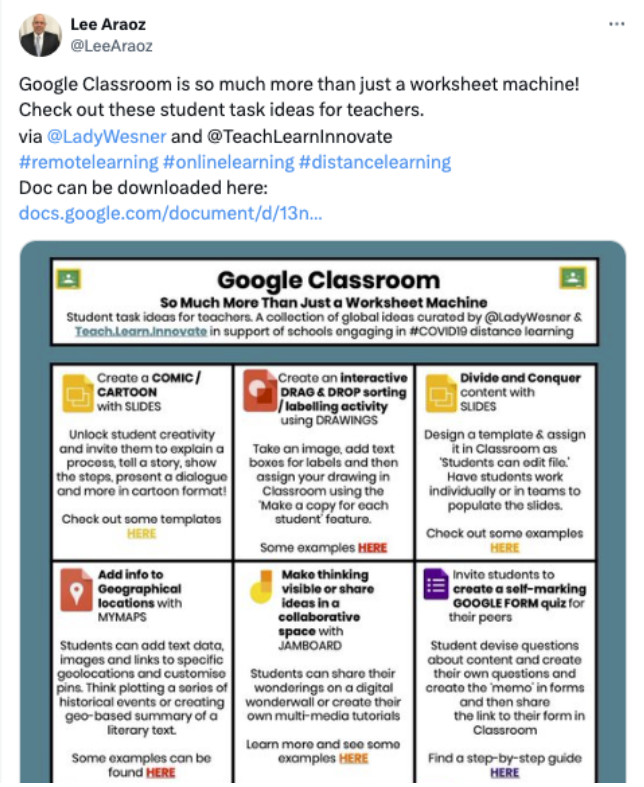


Figure 84

Esther Park shares Google for EDU activities

Figure 85

Mike Tholfsen's MicrosoftEDU post

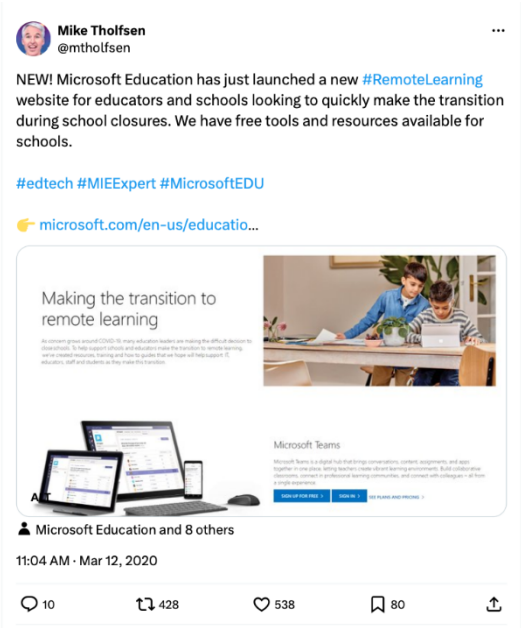


Figure 87

Alice Keeler's tips for sharing YouTube videos

Figure 86

Tholfsen's Publish to Stream post

The use of video conferencing tools like Google Meet, Zoom, and Microsoft Teams also became a staple in remote learning. Google Meet's simplicity and seamless integration with other Google services made it a reliable choice for educators. Zoom's ease of use and reliability catered well to synchronous class sessions. Microsoft Teams offered an all-in-one platform that combined video conferencing with collaborative tools, integrated within the Office 365 ecosystem. Tweets focused on best practices for using each of these tools provided teachers with a choice of platform for remote videoconferencing.

Figure 88

Tholfsen shares Microsoft Teams tips

Figure 89

Jake Miller shares Zoom best practices

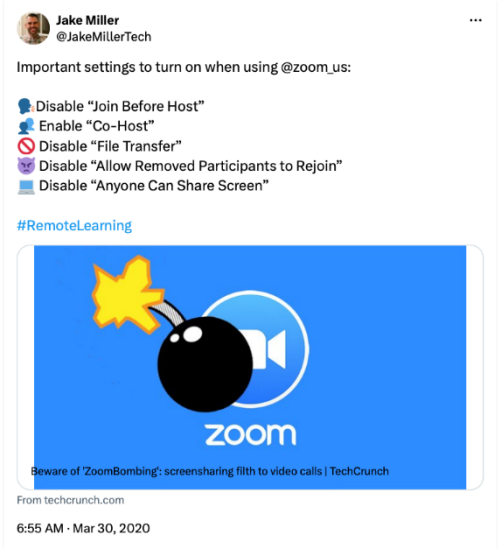


Figure 90

Billy Kakower's post about Google Hangouts

However, the narrative around technology platforms was dual-faceted. While it highlighted the transformative potential of technology in reshaping education, it also cast a critical eye on the commoditization of the education sector by major technology companies such as Microsoft, Apple, Google, and platforms like Zoom, Google Meet, and Microsoft Teams. Indeed, this was even true for my own employer, who worked with many school districts and higher education institutions to enable remote learning during COVID-19. The enthusiastic adoption of these platforms during the pandemic raised pertinent questions about the growing impact of these companies on educational practices and policies. The conversion of educators, schools, and districts through the adoption of specific platforms posed risks such as the loss of educational autonomy and the potential for decreased interoperability and data privacy issues through vendor lock-in. While these technologies offered solutions to the immediate challenges of the pandemic, they also brought to light the broader implications of technological commoditization in education. This exploration is not just about recognizing the utility of digital tools; it's about understanding the complex socio-political and cultural contexts that shaped and were influenced by these technological advancements in education.

Theme 5 – Community Building

Theme 5 encapsulated the spirit of community building that was pivotal to remote learning as it was experienced during the COVID-19 pandemic. Kathi Kersznowski's engagement and promotion of the #RemoteLearning hashtag epitomized a global alliance of educators, creating a supportive digital sphere for exchange and camaraderie. Similarly, Kathleen Morris's tweet distributing an online teaching guide signified a hub for shared learning and pooling of resources, in this case using the hashtag #onlinelearning.

Figure 91

Tweet 4 from Kathi Kersznowski

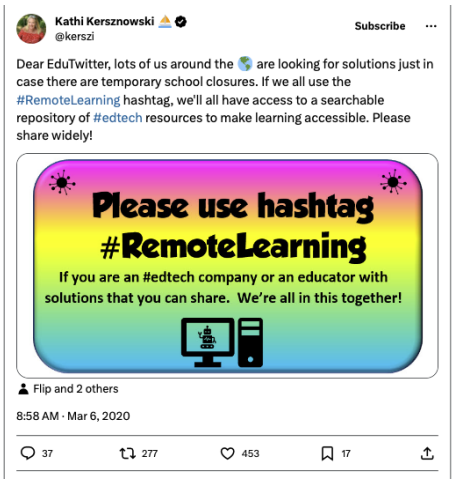


Figure 92

Dr. Caitlin Tucker shares video conferencing tips

Figure 93

Tweet 2 from Kathleen Morris

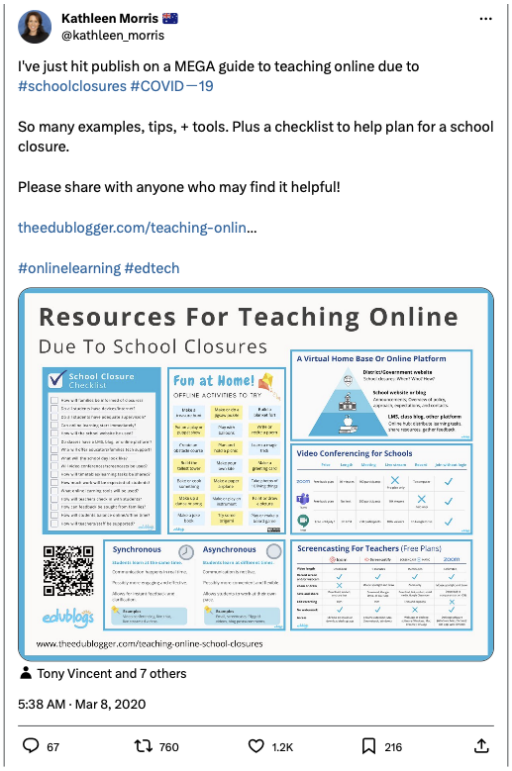


Figure 94

Todd Finley's tips for remote learning

Additional posts from Todd Finley and Dr. Caitlin Tucker expanded the reach of these messages to a broader set of online education communities through hashtags like #edchat, #elearning, and #AfricaED. These tweets underscored the transformative influence of social media platforms, facilitating resource sharing and building supportive networks. The use of digital platforms not only connected educators but also amplified the potency of collaborative efforts in overcoming remote learning obstacles. While additional hashtags provided similar communal resource building around specific topics, educators continued to layer on further value through their contributions.

Figure 95

Brad Weinstein's before you assign checklist

Figure 96

TeacherGoals post on teacher well-being

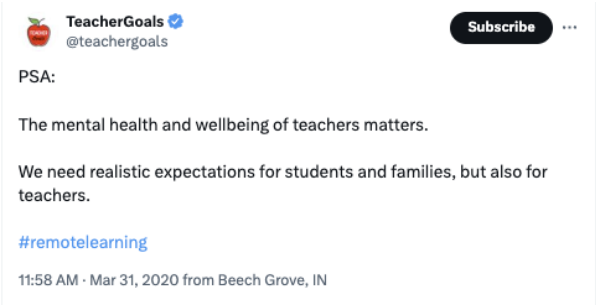


Figure 97

Tholfsen's MicrosoftEDU post

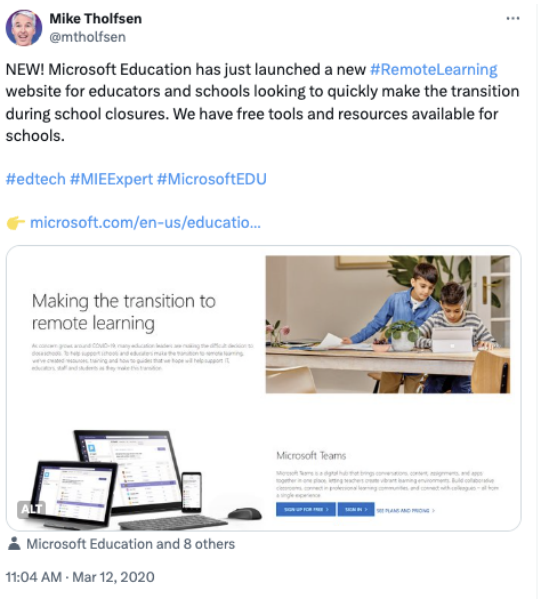


Figure 98

Chris Woods' second list of 77 STEM activities

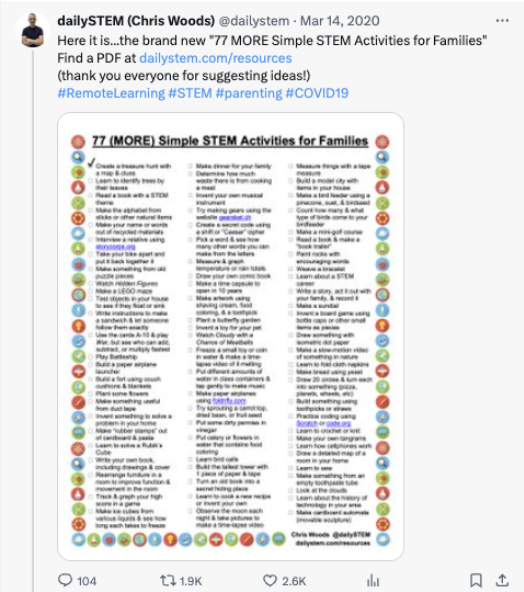


Figure 99

Amelia Powers' post about resource sharing

The tweets from Mike Tholfsen, Chris Woods (@dailySTEM), Brad Weinstein, TeacherGoals, and Amelia Powers each added to this evolving narrative. Powers provided connection through hashtags, but also through a shared spreadsheet of edtech companies offering free subscriptions. Tholfsen showcased collaboration through Microsoft's #RemoteLearning community, while Woods provided easily accessible educational resources for families to contribute to the supportive network crucial during remote learning. Weinstein presented essential questions for educators to ask before assigning tasks to students. These questions focused on independent work capability, student choice, equity, and time commitment, playing a critical role in shaping the remote learning experience. Finally, TeacherGoals' tweet focused on the mental health and well-being of teachers, stressing the need for realistic expectations for educators in the remote learning context.

This collective narrative recounted the challenges and responses of a global pandemic. It showcased the power of community in crafting a more inclusive and robust educational paradigm. The educational conversations included in this discourse underscored the capacity for empathy, collaboration, and innovation in redefining educational practices and priorities.

Conclusion

As this chapter, and particularly the detailed exploration of the cross-cutting themes within the remote learning discourse, ends, it brings back into focus the dynamic and nuanced nature of education during the COVID-19 pandemic. Each theme discussed offered a unique lens through which to view the challenges and transformations of remote learning. These insights not only align with the theoretical frameworks established in the initial chapters but also extend our understanding of how educators, students, and parents navigated this unprecedented education environment. It is evident that the pandemic was a catalyst for significant changes in educational priorities and practices. This chapter underscores the need for a holistic approach to education - one that embraces emotional well-being, equitable access, technology integration, and collaboration. These findings lay a foundation for future pedagogical practices and policies, suggesting a paradigm shift towards more empathetic, inclusive, and technologically adept education.

CHAPTER V

DISCUSSION

Introduction

The purpose of this study was to explore and analyze the nature of the discourse surrounding remote learning on Twitter during the early stages of the COVID-19 pandemic. The research, grounded in my professional background in educational technology and K-12 education, examines the historical, technological, and pedagogical aspects of remote learning, with a focus on the pandemic's influence on educational practices. The scope of the research encompasses an in-depth critical discourse analysis informed by the theoretical foundation of Foucault (1972), and particularly his concepts of discourse and power. This methodology was chosen for its potential to unravel the complex relationships between language and power in education during a significant global crisis. The study not only examines the conversations emerging on Twitter but also situates these within broader educational and societal contexts. By doing so, it aims to highlight how these discourses reflect, shape, and are influenced by the power dynamics present in the remote learning environment.

The research stands at the intersection of several critical areas: the historical evolution and technological aspects of remote learning, the theoretical framework of discourse analysis, and the practical implications of these findings for future education policy and practice. By approaching the topic from each of these lenses, the study seeks to contribute new and complicated understandings of remote learning during a critical moment in the history of

education and to provide insights for shaping more equitable and responsive teaching and learning environments for the future. The primary research problem explored in this dissertation stems from the substantial shift in educational paradigms caused by the COVID-19 pandemic. The study examines the nature of discourse on Twitter concerning remote learning, seeking to understand the underlying power dynamics, challenges, and opportunities that emerged in this new educational landscape. Specifically, the research questions explored during the study are:

1. From the COVID pandemic, what were the dominant and particular narratives that emerged?
2. What learning discourses were superordinated, subordinated, and excluded?
3. What transformative learning was enabled or constrained?

My motivation for choosing this topic is deeply rooted in my professional experiences as a remote learning specialist in a large corporation and my background in K-12 education in schools in the Rio Grande Valley. This combination of roles provided me a unique vantage point to observe and engage with the rapid transition to online learning, both as a technology consultant and a stakeholder in education. The abrupt move to remote learning highlighted the need for a deeper analysis of the discourse surrounding it, not just in terms of how it was implemented technologically but also in understanding its broader implications on education systems, teacher-student dynamics, and equity.

Summary of Findings

From an initial dataset of over two hundred thousand Twitter posts, the initial six sampled tweets were analyzed according to the reverse-immersion strategy outlined in the methods chapter. These selected tweets revealed several grand discursive themes that were pivotal during the pandemic: the shift in educator roles, the surge in resource sharing online, the

intensified focus on teacher and student well-being, the building of community bonds, and the utilization of technology in facilitating remote learning.

The analysis of the six original tweets reveals diverse perspectives on remote learning during the COVID-19 pandemic. Each tweet highlights a unique aspect of the remote learning experience, from acknowledging the challenges of teaching at home and emphasizing student well-being, to sharing resources and utilizing technology effectively. The tweets collectively offer insights into the adaptability of educators, the role of technology in learning, and the importance of community and emotional support in educational settings during a crisis. The analysis illustrates a multifaceted view of the remote learning experience, emphasizing the need for flexibility, empathy, and collaborative effort in education.

Individually, the tweets reveal several discursive formations that speak to education during COVID-19. First, resource sharing among educators and technology companies allowed experienced educators and EdTech providers to help those less experienced adopt remote learning and draw from an ever-growing set of tools. Next, heightened awareness of the holistic well-being of students and teachers was highlighted through expressions of concern on social media. Equity continued to be a primary concern, highlighted most of all by the lack of internet and device access that some students experienced. Next, the adoption of technology platforms and best practices for using these tools was highlighted both by edtech providers and educators with expertise in specific platforms. Finally, online community building amplified all of these conversations under hashtags such as #RemoteLearning and #OnlineLearning.

To provide a more comprehensive understanding of the remote learning discourse, a second phase of exploration was then used to draw connections between the original tweets and others. This analysis adds depth and validation to the findings from the individual tweets,

showing how they collectively reflect broader themes in education during this critical period. The insights gained from this section directly align with and provide an enriched view of the themes that were discussed in the examination of the initial sample, from teacher recognition to technology use in remote learning.

Interpretation of Findings

The dialogues on Twitter regarding remote learning during the COVID-19 pandemic offer a distinct perspective on the unfolding narrative of this new educational model. The language used in these exchanges serves not just as a reflection of collective sentiment. It is also an active participant in constructing the reality of remote learning environments.

The dataset revealed a lexicon saturated with emotion; words such as "struggle," "share," and "resilience" frequently surfaced. These terms were not merely descriptive but functioned as dynamic constructs within the narrative of remote learning, contributing to the societal understanding and reception of this emergent form of education. The cumulative effect of these words shaped perceptions and attitudes, illustrating the impact of language on educational discourse.

The rhetorical strategy of using direct address and first-person narratives in tweets effectively cultivated a sense of virtual community, which was especially pertinent during times of widespread physical isolation. This echoes the theories of Foucault (1972) regarding the role of discourse in the creation and perpetuation of knowledge and societal norms. These dialogues extend beyond the logistics of remote learning; they are instrumental in defining its social identity.

Contrasting with the presence of personal, immediate narratives was the lack of discussion around systemic educational issues and policy critiques. This could be attributed to

the platform's preference for immediate, experiential narratives over abstract policy analysis. This possibly reflects both the methodological constraints of the medium and the unique communicative nature of Twitter as a platform.

Additionally, the dialogues reveal a shift in the power dynamics of educational discourse. Educators, traditionally viewed as figures of authority, openly shared their vulnerabilities, suggesting a shift toward more democratic discourse in education. This aligns with Foucault's (1972) discourse on the distribution of knowledge and power, suggesting a move towards a more equitable dissemination of pedagogical authority in society.

Implications of Findings

Theoretically, this research enriches the dynamic interpretation of educational theories, most notably social constructivism (Vygotsky, 1960) and transactional distance theory (Moore, 1997). It pushes the boundaries of traditional educational paradigms, highlighting the importance of social interaction within learning environments that lack physical proximity. This challenges existing educational frameworks and affirms the need for a socially-rich educational experience, even in the absence of a traditional classroom setting.

Methodologically, the study charts new territory in the analytical application of social media discourse. It demonstrates the utility of social media as a real-time, diverse repository of educational experiences and sentiments. This approach not only expands the existing corpus of educational research data but also sets a precedent for future inquiries to tap into this digital data lake for richer, more comprehensive educational insights.

On a practical level, the implications of this study are multifaceted. For educators, it underscores the necessity of comprehensive pedagogical approaches that intertwine emotional support with academic instruction. For policymakers, the findings are a call to consider reflective

policy reforms that address the technological inequities the pandemic has highlighted. For educational technology developers and consultants, the insights gained provide a roadmap for creating technologies that are supportive of social interconnectedness.

Furthermore, this research prompts a critical reevaluation of educational strategies, advocating for the creation of systems that are adaptable and encompass a variety of learning modalities. The incorporation of technology is essential, not just as a tool for information delivery but as a medium to foster collaborative and interactive learning environments. In essence, the research provides a detailed examination of remote learning, advocating for an education system that is flexible, compassionate, and seamlessly integrated through technology. This reflects the distinct nature of learning in a world that is continuously evolving and highlights the need for educational practices that are as versatile and complex as the societal and technological landscapes they inhabit.

Future Direction of the Research

This inquiry into remote learning practices during the COVID-19 pandemic paves the way for numerous avenues for further research, which could enrich our understanding of remote learning's implications across different educational contexts. Through shifting the focus from this collective experience focused on discourse to an examination that incorporates other facets of remote learning, future research can cultivate a comprehensive understanding of this educational phenomenon. By doing this, a more expansive understanding of the phenomenon and its implications across various educational scenarios is possible.

Future studies might, for instance, investigate remote learning within diverse cultural settings, economic situations, and educational systems. Such comparative analysis is crucial for developing strategies that are universally effective and inclusive. Extending research across

different educational levels, from elementary to higher education, will also deepen our understanding of how remote learning can be optimized for students at various stages of their educational journey.

Additionally, there is also a pressing need for a deeper exploration into the psychological impacts of remote learning, particularly its effects on student and teacher mental health, academic performance, and motivation. Understanding the emotional and cognitive load of remote learning can guide the development of more supportive and effective educational practices. This has strong ties to the "well-being" discursive formation revealed in the analysis of the tweets. Another related suggestion is toward investigating the long-term impacts to conventional educational methods prompted by the sudden shift to remote learning during the pandemic. Extended research into the psychological and educational after-effects of this global transition could provide critical data for the shaping of future educational policies and systems. This could enhance our readiness for similar occurrences in the future.

Next, investigating the impact of technological literacy among diverse demographics could uncover significant disparities in access to and the efficacy of remote learning. This research should include a critical review of the relationship between specific educational technologies—such as learning management systems, AI-driven tutoring systems, and virtual collaborative platforms—and remote learning outcomes. Such studies could inform more equitable technology deployment strategies in education.

Further inquiry into the understanding of how educational discourse evolves on social media platforms could also be useful for theory and practice in education. Social media plays a pivotal role in shaping educational trends and perceptions, making it an important area of study for both theoretical advancement and practical application in educational technology. This

underscores the importance of incorporating emotional and community elements in the development and implementation of educational technology. This type of research could become invaluable for designing educational systems that are both resilient and adaptable to future challenges. These types of studies might also explore the permanence of these changes—identifying which emergent practices might become standard and which may revert to pre-pandemic norms.

Finally, the role of educator and student agency in remote learning environments offers a rich field of study. Examining how teachers and students negotiate their roles in these new settings can provide insights into the power dynamics of remote education and its impact on educational equity and authority. The negotiation of identities necessitated by COVID opens many doors for further inquiry.

The Medium of Twitter as the Message

In analyzing the dynamics of Twitter discourse on online learning during the COVID-19 pandemic, it becomes imperative to consider the platform not merely as a backdrop but as an active participant in the construction of this discourse. Marshall McLuhan's (1975) adage, "The medium is the message," underscores the significance of understanding Twitter as an accelerated technological discourse, a medium that fundamentally shapes the messages it conveys.

As we explore how Twitter has served as a platform for defining and refining the practices of remote learning, Foucault's (1972) insights into the role of discourse provide a compelling framework. He suggests that, "Discourses are practices that systematically form the objects of which they speak" (p. 49). This perspective prompts us to consider how the conversations on Twitter do more than discuss remote learning—they actively construct its reality.

This theory is evidenced through the analysis of tweets where educators share strategies, challenges, and successes. Each tweet contributes not merely to a conversation about remote learning but to the shaping of what remote learning is perceived to be and how it should be conducted. Moreover, the systematic formation of remote learning through Twitter discourses has implications for policy and practice. As these discourses proliferate, they solidify certain views and methodologies, potentially influencing decision-making at institutional and policy levels.

Foucault's (1972) assertion that discourses systematically form the objects they discuss underscores the transformative power of Twitter as a discursive space. This analysis not only highlights how educational practices are debated but also how they are defined and developed through social media interactions.

Twitter, as a modality, plays a dual role - it enables and constrains the nature of discourse, particularly through its structure and computational logic. The platform is defined not just by its capability to facilitate rapid dissemination of information but also by the constraints imposed through its design—character limits, the algorithmic filtering of feeds, and user interface all play pivotal roles in shaping how information is created, shared, and consumed. These design choices do not merely affect the superficial spread of content but deeply influence the accessibility and reproducibility of information, thereby shaping discursive practices within the platform.

Firstly, the explicit rules of participation on Twitter—such as the limitations on tweet length and the mechanisms of user verification—create a unique landscape for communication. These rules often privilege brevity and immediacy, potentially sidelining more nuanced or complex discourse. Furthermore, Twitter's policies on content moderation, despite being aimed

at creating a safer communicative space, can also lead to the silencing or marginalizing of certain voices or topics. This governance structure reflects Foucault's (1972) concept of discursive formations, where the rules underpinning a discourse define its boundaries and influence what is considered valid or acceptable within that discourse.

Implicit norms of interaction on Twitter also play a critical role. The culture of retweets, hashtags, and @mentions creates an ecosystem where certain types of content are more likely to be amplified, while others are ignored. This culture not only influences user behavior but also shapes the lifecycle of information, often prioritizing content that is sensational, controversial, or aligns with popular narratives. This aspect of Twitter's modality can be seen as both a replication of existing power structures and a challenge to them, as it allows for significant messages to be amplified rapidly and widely, sometimes bypassing traditional gatekeepers of information.

While Twitter provides a platform for diverse educational discourse, it is important to recognize the mechanisms through which this discourse is managed. Foucault's insights into the production of discourse highlight the underlying controls that shape these conversations. Foucault (1972) elucidates this concept, stating, “In every society the production of discourse is at once controlled, selected, organized and redistributed by a certain number of procedures whose role is to ward off its powers and dangers, to cope with chance events, to evade its ponderous, formidable materiality.” (p. 212)

In the realm of Twitter, these procedures manifest as algorithms that prioritize certain posts, moderation policies that filter content, and the influence of prominent accounts that guide the flow of discussion. These factors collectively shape the narrative and influence which aspects of remote learning are amplified or suppressed. For instance, tweets from influential educational leaders often gain more visibility and traction, thereby organizing the discourse around their

perspectives. Similarly, Twitter's algorithm may prioritize tweets with higher engagement, selectively amplifying certain discussions over others.

This control and organization raise questions about the democratic nature of discourse on digital platforms. While seemingly open, the discourse on Twitter is shaped by underlying structures that determine which voices are heard and which are marginalized. Understanding the controlled nature of discourse as described by Foucault is crucial for educators and policymakers engaging with social media. Recognizing these dynamics allows for a more critical engagement with digital platforms, ensuring that educational discourse not only reaches a wide audience but does so in a manner that truly reflects diverse perspectives.

Importantly, the motives of commodification and profiteering are deeply embedded within the platform's operational model. Twitter, as a corporate entity, monetizes user engagement, which can lead to the platform algorithms favoring content that is more likely to generate interaction and ad revenue. This economic underpinning can skew the platform towards entertainment and sensationalism, potentially at the expense of informative or educational discourse. This commodification of discourse aligns with Foucault's (1980) power/knowledge concept, suggesting that knowledge on Twitter is not just shared but is also produced and manipulated for economic gains, thereby influencing the construction of truth and reality on the platform.

Lastly, the accessibility and reproducibility of tweets bring forth critical considerations. The digital divide means that not all potential users can access Twitter equally, thereby influencing who gets to participate in the shaping of discourses around key societal issues like education during a pandemic. Additionally, the ease with which tweets can be reproduced

(retweeted) can lead to rapid dissemination of both information and misinformation, impacting public understanding and response to crisis situations.

Twitter's role as a medium in the discourse of online learning during COVID-19 is profound and complicated. By unpacking how Twitter as a platform influences the accessibility, visibility, and reproducibility of educational discourses, this analysis reveals the complexities involved in the interplay between technology and discourse, highlighting the need for a nuanced understanding of digital platforms as active constructors of social reality.

Discussion

The pandemic's impact on education revealed the contrast between structuralist and poststructuralist approaches, particularly in the realms of traditional schooling versus remote learning. Structuralist theories, such as those by Moore (1997) and Vygotsky (1960), emphasize systematic knowledge construction within fixed structures. However, the pandemic's arrival necessitated a shift to online learning, which is characterized by its unprecedented flexibility and unpredictability. This shift challenged the rigidity of structuralist perspectives, uncovering the need for more fluid educational models as espoused by poststructuralist thinkers like Foucault (1972). The pandemic amplified the complexities and discontinuities in curriculum design and underscored the need for continuous adaptation and evolution in educational practices.

The COVID-19 pandemic acted as a significant historical disruptor, akin to the discontinuities described by Foucault (1972). This disruption has catalyzed unexpected shifts in educational discourse and practice, which was especially evident in discussions on Twitter. Foucault (1972) articulates this concept of historical discontinuities, noting:

> the notion of discontinuity assumes a major role in the historical disciplines. For history in its classical form, the discontinuous was both the given and the

> unthinkable: the raw material of history, which presented itself in the form of dispersed events - decisions, accidents, initiatives, discoveries" (p. 8).

In the context of education, the pandemic introduced a series of unforeseen changes and challenges, from remote learning implementations to conversations about educational equity. These events, discussed extensively on Twitter, represent the *dispersed events* that Foucault describes, challenging the continuity of traditional educational frameworks. This is evidenced by a surge in tweets from educators sharing online learning resources and strategies, which marked a distinct break from previous discussions focused primarily on in-person educational methods.

These discontinuities have not only highlighted vulnerabilities and opportunities within the education sector but have also set the stage for potentially transformative changes in how education is delivered and conceptualized post-pandemic. As Foucault (1972) suggests, understanding these discontinuities is crucial for comprehending the broader historical narrative. Twitter, therefore, serves not just as a communication tool but as a living archive where these transformative moments in education are debated, documented, and developed.

Poststructuralist concepts like decentering and relational power highlight that meaning and power are dynamically shaped through ongoing negotiation and changes in context. This viewpoint was especially relevant during the pandemic, as remote learning disrupted traditional education norms and power structures. Discursive strategies became vital in shaping perceptions and practices for remote learning, reflecting the transformative power of discourse in education.

The pandemic's propulsion of education into the remote learning era exemplified the generative and interactive community that poststructuralist thought predicts. The structuralist underpinnings of Vygotsky (1960) and Moore (1997), with their fixed learning architectures, gave way under the weight of the pandemic, to a live discursive field online, one that far-

extended the limits of traditional curriculum. As Jupp (2009) discusses, this linguistic turn, especially when applied to discourses on platforms like Twitter, created and perpetuated a renegotiation of knowledge and power – where educators and students coalesced into a community that consumed and created and interacted with a curriculum in real time. This discursive, social media-centric, navigation through remote learning stands as a real-world reenactment of Foucault's (1972) discourse theory, where the community jointly crafted an emergent curriculum that was simultaneously reflective of and responsive to the complex realities of the COVID pandemic. As we consider the thematic regularities identified in the Twitter discourse on remote learning, Foucault's concept of 'discursive formations' offers a crucial theoretical lens to understand these patterns. According to Foucault (1972):

> Whenever one can describe, between a number of statements, such a system of dispersion, whenever, between objects, types of statement, concepts, or thematic choices, one can define a regularity (an order, correlations, positions and functionings, transformations), we will say, for the sake of convenience, that we are dealing with a discursive formation. (p. 38)

This framework illuminates how the discourse on Twitter not only reflects a scatter of individual opinions but forms a coherent set of educational concerns and strategies that have evolved into a recognizable discursive formation during the pandemic.

For instance, the recurring theme of digital equity has surfaced across numerous discussions, demonstrating a discursive formation around the necessities and challenges of remote education. These discussions have not only highlighted the key issues but also proposed transformations in educational practice and policy.

By applying Foucault's concept of discursive formations to the Twitter data, we gain a more nuanced understanding of how remote learning discourses have structured the educational landscape, influencing policy and practice. This analysis underscores the power of social media as a platform for significant educational discourse and reform.

Resource sharing and collaboration became central themes in online discourse, with hashtags like #RemoteLearning encouraging educators to exchange resources, advice, and support. EdTech companies played a significant role, often providing free access to services and resources, highlighting the importance of making learning accessible to all students during school closures. Transformative learning during the pandemic involved adopting new pedagogical approaches and adapting to digital platforms. The challenges, such as the digital divide and varying levels of digital literacy, reflected the opportunities and barriers that still exist in the shift to remote learning. This transformative experience, however, was often constrained by socio-economic disparities, which the discourse frequently overlooked. The lack of focus on these disparities in the narrative underlines the need to acknowledge and address these issues for a more equitable educational future.

As we navigate the complex landscape of educational transformation during the pandemic, Foucault's (1972) exploration of discourse provides a profound framework for understanding these changes. He describes his analytical approach in terms that resonate with our examination of Twitter discourses - "This dispersion itself – with its gaps, its discontinuities, its entanglements, its incompatibilities, its replacements, and its substitutions," (p. 71).

This perspective compels us to examine not just how education discussions on Twitter continue pre-pandemic practices but more critically, how they depart from them, introducing new thresholds and transforming the educational landscape. For instance, the rapid shift to

discussing and sharing remote teaching tools and strategies on Twitter marks a clear discontinuity from previous educational discourses focused predominantly on in-class strategies.

These transformations challenge traditional pedagogical models and suggest a potential redefinition of educational norms and practices. By examining these shifts through Foucault's lens, we gain insights into the potential permanence of these changes and their implications for future educational policies. By defining the dispersion of discourse as Foucault suggests, we not only track the evolution of educational conversations during the pandemic but also anticipate the lasting transformations in how education is conceived and delivered. This analysis underscores the critical role of platforms like Twitter in documenting and driving educational change.

But this transformation was only possible through the proactive response of educators in conjunction with EdTech companies. With little or no formal mandate and little or no guidance on how to achieve this daunting task, they recognized the urgent need for continuity in education amid the crisis and pivoted almost overnight to remote learning. This collective effort was not just a response to immediate challenges but a demonstration of a broader shift towards collective problem-solving and a community ethos in times of crisis. Educators and EdTech companies collaboratively engaged in resource sharing, adopting a socially-rooted process of learning and adaptation to remote environments. This effort was characterized by the use of social media platforms, like Twitter, where hashtags like #RemoteLearning served as rallying points for sharing resources, advice, and support. EdTech companies played a significant role by providing free access to their services and resources, reflecting a symbiotic relationship with educators who relied on these services to facilitate remote learning.

During this unprecedented shift to remote learning, Twitter emerged as a vital platform for educational collaboration. Reflecting on Vygotsky's principles of social constructivism, it

becomes evident how the platform facilitated a unique environment for constructing knowledge. Vygotsky (1960) emphasized the importance of social interactions in learning, noting, “Social constructivism is the idea that people create meaning through interaction with others. This co-construction of knowledge is both an act of collaboration and an emergence of understanding a concept or an idea.” (p. 96).

This theoretical perspective is exemplified through the countless interactions on Twitter where educators shared best practices and learning materials. These exchanges not only offered immediate practical support but also facilitated a deeper understanding of remote teaching strategies among peers. Integrating Vygotsky's (1960) concept of social constructivism into the analysis of Twitter as a collaborative educational platform highlights how essential social interaction is in the learning process, particularly when traditional educational settings are disrupted.

Additionally, Moore's (1997) Transactional Distance Theory provides a pertinent theoretical lens to examine the changes experienced during the shift to remote learning:

> Distance education is not simply a geographic separation of learners and teachers but more importantly is a pedagogical concept that describes the universe of teacher-learner relationships that exist when learners and instructors are separated by space and/or time. This universe of relationships can be ordered into a typology that is shaped around the most elementary concepts of the field – namely the structure of instructional programmes, the interaction between learners and teachers, and the nature and degree of self-directedness of the learner." (p. 22).

This perspective challenges us to reconsider not only the physical separation in remote learning but also the pedagogical structures that govern interactions. The online setting redefines how

instructors and students connect, collaborate, and communicate, fundamentally altering the educational experience. For instance, the use of synchronous and asynchronous tools varied widely, impacting the degree of interaction and the nature of the pedagogical relationships formed. Platforms like Zoom allowed for real-time discussions, while others relied on more self-directed learning approaches.

These observations underscore the complex interplay between instructional design and transactional distance. As Moore suggests, the structure of programs and the level of interaction directly influence the pedagogical relationships and, ultimately, the educational outcomes. Integrating Moore's Transactional Distance Theory into our understanding of pandemic-era education reveals key insights into the adaptability of teaching and learning processes. It highlights the need for educational models that can dynamically adjust to varying degrees of distance and interaction, ensuring effective learning regardless of physical proximity.

The symbiosis between educators and large EdTech companies is contrasted starkly by a parasitic element. While the assistance of these companies to schools during the pandemic was benevolent in nature, the capitalist heart of these companies is one that does not overlook the opportunity in crisis. The competitive nature of platform technology companies demands a "land grab" of customer share. Gaining new customers by allowing the "free" use of tools for a short time leads to market share within a specific category and the later conversion of free licenses to paid licenses.

Additionally, promoting adoption of one suite of tools by whatever means inherently makes later moving to another platform complex, lengthy, and costly. For example, the adoption of Microsoft 365 productivity tools makes a switch to Google Workspaces a time-consuming process, broad use of Zoom meetings makes customer acceptance of another technology such as

Microsoft Teams or Google Meet difficult, and switching from VMware Horizon Virtual Desktop Infrastructure to Citrix Virtual Desktops is costly in terms of hardware infrastructure replacement, software licensing, and the professional development of capable systems administrators.

This discourse around remote learning and the collaborative efforts of educators and EdTech companies reflect a broader narrative about the necessity of swift adaptation to remote learning and the global response to the pandemic's challenges. The focus on making resources free or low-cost tied into broader societal issues of educational equity and the digital divide. Additionally, the conversation revealed a significant shift in the role of educators from traditional teaching roles to becoming curators of digital content and facilitators of online communities.

In summary, the pandemic underscored the limitations of structuralist approaches in education, especially in the context of remote learning. It highlighted the need for poststructuralist perspectives that emphasize fluidity, adaptability, and inclusivity in educational practices, challenging traditional understandings and structures. The shift to remote learning not only transformed educational methods and approaches but also brought to light the power dynamics and disparities that need to be addressed for a more equitable and responsive education system.

Conclusion

As this chapter draws to a close, it is vital to reflect on the extensive journey I have embarked upon in exploring the nuances of remote learning discourse during the COVID-19 pandemic, as illuminated through the lens of Twitter. This investigation has uncovered a variety of perspectives, exploring the emotional resonance, the spirit of communal solidarity, and the transformative nature of remote learning experiences. Importantly, this research makes its own

significant contribution to the broader fields of educational technology and discourse analysis. It sheds light on the educational responses to a global crisis, offering a unique lens through which to view the interplay of technology, discourse, and, most importantly, learning.

The affective dimension of learning in remote settings became more prominent during the pandemic. While anxiety, isolation, and uncertainty were common among learners and educators alike, this led to a heightened awareness of emotional intelligence and empathy in teaching and learning practices. Learning shifted towards a more holistic, poststructural approach and extended beyond cognitive skills to include emotional and social competencies.

The pandemic also underscored the importance of community in the learning process. As physical distancing became the norm, the need for a sense of belonging and community in teaching and learning became more important. Online learning environments facilitated the creation of virtual communities, breaking down traditional classroom walls and enabling a more generative, collaborative learning model.

Additionally, remote learning highlighted individual responsibility in the learning process. Teachers and students had to take more ownership of learning and teaching, managing their time and resources in the absence of a traditional classroom structure. This shift aligns with my own experience in supporting students' access to technology and resources, which empowered teachers and students to take charge of the educational journey.

Finally, the pandemic and the rise of remote learning demonstrated the interconnected nature of our global education system. Learning moved from rigid, structural frameworks to more fluid, poststructural paradigms. The rapid adaptation to online learning tools and platforms highlights this interconnectedness. Technology serves as a bridge linking learners, educators, and resources worldwide.

Looking toward the future, the research directions proposed in this chapter represent both a call for deeper inquiry and a roadmap for more comprehensive exploration. They advocate for an approach to remote learning research that is as diverse and profound as the subject itself, encompassing a range of populations, varying educational settings, and the intricate relationship between technology and the human aspects of education. This study stands as a testament to the scholarly pursuit of understanding and the resilience, adaptability, and innovation that have characterized educational responses to remote learning in pandemic times. It reminds us of the transformative power of discourse in shaping our educational realities and underscores the critical role of technology as a navigational tool in these uncharted waters.

We have witnessed a seismic shift from the prescriptive confines of structural learning to the generative expanses of poststructural paradigms. This evolution is illuminated by the discourse surrounding remote learning during the pandemic and emphasizes the creation of knowledge as a continuous and fluid process – a journey rather than a destination. No longer tethered to objective-based instruction, educators and learners have embraced a model that thrives on the open-ended discourse that welcomes diverse voices and perspectives and where learning unfolds in a dynamic and generative space. This study suggests that education must not be static, but become a living, breathing entity that adapts and grows with each contribution from a global classroom. The emergent nature of knowledge celebrates the journey of learning as an end unto itself, where the contours of discourse carve out new pathways for discovery.

It is clear that the terrain of education has been indelibly altered. The contributions of this study advocate for embracing the uncertainty and potential that this generative discourse allows. They will guide the community in navigating an increasingly digital world, ensuring that our educational practices remain dynamic, responsive, and above all, human centric. By supporting

an environment where the means of education are as valued as the ends, we equip learners not only to navigate the current landscape, but also to shape the topography of future learning. This study stands not only as a reflection on the transformation witnessed but also as an invitation to continue the discourse, to participate in the generative act of shaping education for tomorrow.

REFERENCES

AASA. (2020). *Guidelines for reopening schools from the AASA COVID-19 Recovery Task Force.* Retrieved November 27, 2020, from https://aasa.org/home/

Bates, T. (2014). *A short history of educational technology*. Retrieved from https://tonybates.wpengine.com/2014/12/10/a-short-history-of-educational-technology

CDC. (2020, October 29). *Operating schools during COVID-19: CDC's considerations*. Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/schools.html

Cherryholmes, C. (1988). *Power and criticism: Poststructural investigations in education*. Teachers College Press.

Darling-Hammond, L., & Hyler, M. E. (2020). Preparing educators for the time of COVID... and beyond. *European Journal of Teacher Education, 43*(4), 457–465. https://doi.org/10.1080/02619768.2020.1816961

Derrida, J. (1970). Structure, sign, and play in the discourse of human sciences. In H. Adams & L. Searle (Eds.), *Critical theory since 1965* (pp. 278-294). Florida State University Press.

Deseriis, M. (2017). Technopopulism: The emergence of a discursive formation. *TripleC: Communication, Capitalism & Critique. Open Access Journal for a Global Sustainable Information Society*, 15(2), 441-458.

Fairclough, N. (2015). *Language and power* (3rd ed.). Routledge.

Fairclough, N. (1995). *Critical discourse analysis*. Longman.

Falloon, G. (2011). Making the connection: Moore's theory of transactional distance and its relevance to the use of a virtual classroom in postgraduate online teacher education. *Journal of Research on Technology in Education, 43*(3), 187–209.

Foucault, M. (1972). *The archaeology of knowledge and the discourse on language*. Dorset Press.

Foucault, M. (1980). *Power/knowledge: Selected interviews and other writings, 1972-1977* (C. Gordon, Ed.; L. Marshall, C. Gordon, J. Mepham, & K. Soper, Trans.). The New Press.

Foucault, M. (1986). Of other spaces (J. Miskowiec, Trans.). *Diacritics, 16*(1), 22–27. https://doi.org/10.2307/464648

Foucault, M., & Hurley, R. J. (1990). *The history of sexuality, Volume 1: An introduction*. Vintage Books.

Foucault, M. (1995). *Discipline and punish: The birth of the prison* (2nd ed.). Vintage Books.

Gee, J. P. (2015). Discourse, small d, big D. In K. Tracy, T. Sandel, & C. Ilie (Eds.), *The International Encyclopedia of Language and Social Interaction*. https://doi.org/10.1002/9781118611463.wbielsi016

Jupp, J. C. (2009). Multicultural humanities: The linguistic turn, implications, and praxis. *Journal of the American Association for the Advancement of Curriculum Studies, 5*(1). https://doi.org/10.14288/jaaacs.v5i1

Hall, A. (2007). Vygotsky goes online: Learning design from a socio-cultural perspective. In *Proceedings of the Learning and Socio-cultural Theory: Exploring Modern Vygotskian Perspectives International Workshop 2007*.

Kim, J. (2020). Learning and teaching online during Covid-19: Experiences of student teachers in an early childhood education practicum. *International Journal of Early Childhood, 52*, 145–158. https://doi.org/10.1007/s13158-020-00272-6

Kozulin, A., Gindis, B., Ageyev, V. S., & Miller, S. M. (Eds.). (2003). *Vygotsky's educational theory in cultural context*. Cambridge University Press.

Lévi-Strauss, C. (1966). *The savage mind* (English translation of the original French version: *La pensée sauvage*, 1962). University of Chicago Press.

Lincoln, A. (1953 [1863]). Address delivered at the dedication of the cemetery at Gettysburg. In R. P. Basler (Ed.), *Collected works of Abraham Lincoln, Vol. 7* (pp. 18-23). Rutgers University Press.

Marstaller, M. (2020). Student experiences of the Covid-19 lockdown. *Changing English, 27*(3), 231-234. https://doi.org/10.1080/1358684X.2020.1777533

McElrath, K. (2020, August 26). Nearly 93% of households with school-age children report some form of distance learning during COVID-19. *Census.gov*. Retrieved August 5, 2023, from https://www.census.gov/library/stories/2020/08/schooling-during-the-covid-19-pandemic.html

McLuhan, M. (1975). *Understanding media: The extensions of man*. Routledge and Kegan Paul Ltd.

Miller, A., Topper, A. M., & Richardson, S. (2017). Suggestions for improving IPEDS distance education data collection. *U.S. Department of Education, National Postsecondary Education Cooperative*. Retrieved November 27, 2020, from http://nces.ed.gov/pubsearch

Mills, S. (2004). *Discourse*. Routledge.

Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). e-Learning, online learning, and distance learning environments: Are they the same? *The Internet and Higher Education, 14*(2), 129-135.

Moore, M. (1997). Theory of transactional distance. In D. Keegan (Ed.), *Theoretical principles of distance education* (pp. 22-38). Routledge.

Ryan, C. (2017). Computer and Internet use in the United States: 2016. *American Community Survey Reports, ACS-39*. U.S. Census Bureau.

Sarup, M. (1993). *An introductory guide to post-structuralism and postmodernism* (2nd ed.). University of Georgia Press.

Saussure, F. de. (2013). *Course in general linguistics* (R. Harris, Trans.). Bloomsbury Academic. (Original work published 1916)

Simmons, D. (2020, July 1). Why COVID-19 is our equity check. *ASCD.org*. Retrieved August 5, 2023, from https://www.ascd.org/el/articles/why-covid-19-is-our-equity-check

Singh, V., & Thurman, A. (2019). How many ways can we define online learning? A systematic literature review of definitions of online learning (1988-2018). *American Journal of Distance Education, 33*(4), 289–306. https://doi.org/10.1080/08923647.2019.1663082

Topinka, R. J. (2010). Foucault, Borges, heterotopia: Producing knowledge in other spaces. *Foucault Studies*, (9), 54-70.

Unger, J., Wodak, R., & Khosravinik, M. (2016). Critical discourse studies and social media data. In D. Silverman (Ed.), *Qualitative research* (4th ed., pp. 277-293). Sage.

Vygotsky, L. S. (1960). *The development of the higher mental functions*. APN.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Wachter, L. K. (2018). J. K. Rowling's tweets following and regarding the Parkland School Shooting: A critical discourse analysis.

Wells, G. (1999). *Dialogic inquiry: Towards a sociocultural practice and theory of education*. Cambridge University Press.

Woo, Y., & Reeves, T. C. (2007). Meaningful interaction in web-based learning: A social constructivist interpretation. *The Internet and Higher Education, 10*(1). https://doi.org/10.1016/j.iheduc.2006.10.005

VITA

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The one constant in Wayne's life was learning, and in 2006, he attended Excelsior University and received a Bachelor of Science in Information Systems. Wayne found work he loved in Instructional Technology in the K-12 environment. He worked and taught at schools in the Rio Grande Valley of Texas, and attained certifications in Technology Applications, English Language Arts, and Principalship, completing his M.Ed. at Lamar University in 2011. In May, 2024, Wayne received his Doctor of Education in Curriculum and Instruction with a Specialization in Educational Technology from The University of Texas Rio Grande Valley.

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