

Generation Z teachers' technology use shapes teaching, understanding of policy, and impression
of leadership

by

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B.S., Kansas State University, 1994
M.A.T., Emporia State University, 2011

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

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Department of Educational Leadership
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Generation Z makes up 21% of the U.S. population (Conte, 2026) and 18.4% of the teaching field (USA Facts, 2025). This study explores how high achieving Gen Z teachers use technology to shape their professional practice and knowledge of education policy. This research further explored how Gen Z teachers prefer administrators to use technology when they lead.

Descriptive qualitative research design uses semi-structured interviews and a collection of artifacts from social media, teacher focused websites, and AI inquiries (Elliott & Timulak, 2019).

The Just-In-Time learning conceptual framework provides context to the ways Gen Z teachers learn just as they need the information, when they need it (Fellay, 2024; Yilmaz et al., 2021).

The findings of this study offer insight into Gen Z teachers' use of social media to make connections and communicate as well as learn and network professionally. Using professional social media profiles, Gen Z teachers put up guardrails and self-censor for protection. In their use of teacher focused websites, Gen Z teachers meet learning standards for students and improve the depth of instruction. Time influences the use of AI by Gen Z teachers despite expressing skepticism when using it. In regards to leadership, Gen Z teachers prefer those who lead them to express competence with technology to ensure efficiency in communications, evaluations, and technology-based management systems. Gen Z teachers define education policy as impacting their jobs as they learn about it through technology.

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Approved by:

Major Professor
Dr. Royce Ann Collins

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Dedication

The decision of a young woman in 1916 ripples to the present. My great grandmother Grace Elizabeth Cook entered a one room schoolhouse and later taught 3rd Grade until the mid-1950s. The “E” in my name is for Elizabeth and I carry it as a tribute to her. Great grandmother Cook inspired her granddaughter, Jeanne, who taught 32 years and married a teacher, Charlie. They had a daughter, Kara. I dedicate this study to the legacy of educators in my family as well as the future, the newest generation – Anna, Lauren, Avery, and James.

Chapter 1 - Introduction

This research study investigates high achieving Generation Z (Gen Z) teacher's use of technology to shape their professional practice and their knowledge of education policy. This research further explored how Gen Z teachers prefer administrators to use technology when they lead. This chapter provides an overview of Gen Z in the workforce, Gen Z teachers in the workforce, and Gen Z teacher use of technology in their professional practice. Following that, the chapter covers the research problem, purpose of the research, and research questions. These are connected in the conceptual framework of Just-In-Time (JIT) learning to explain the learning Gen Z teachers do on the job as they use technology to shape their professional practice, leadership preferences, and knowledge of education policy. Finally, the chapter concludes with the overall research design of this descriptive qualitative research study which describes the participants, data collection methods, data analysis, delimitations, the background of the researcher, significance of the study, and operational definitions used.

Gen Z in the Workforce

Gen Z births began in 1995 and ended in 2010 consisting of 70 million members which make up 20.69% of the current U.S. population (Korhonen, 2024; Seemiller & Grace, 2019a; Twenge, 2023). Gen Z entered the adult workforce at the age of 18 in 2013 and the professional workforce in 2016-2017. As of 2026, Conte (2026) showed Gen Z as 21% of the U.S. population versus Millennials with 22% and the generation following them, Generation Alpha, at 15% of the population. As of the second quarter of 2024, Gen Z workers made up 18% of the workforce surpassing Baby Boomers for the first time at 15%, while Millennials dominate the workforce with 36% and Gen X at 31% (DeMaria et al., 2024). Gen Z stands out as the most educated generation in the workforce with 30.4% earning a high school diploma or equivalent and 32.8%

earning a bachelor's degree, with Millennials earning 25.3% and 28% respectively (DeMaria et al., 2024). The blog CAKE.com reports on workplace dynamics and reveals that by 2030, Gen Z will make up 30% of the workforce as they age and 10% of managers by 2035 (Milojevic & Pavlovic, 2025). Gen Z represents an important and growing part of the U.S. workforce.

The global AI consulting firm, GWI reports stereotypes of Gen Z workers as seeking balance and connection in their lives, concerned about finances, and forging new paths through corporate structures which causes some to consider them disloyal or lazy (Milojevic & Pavlovic, 2025; Moran & Walsh, 2026). To the contrary, GWI found that 16% of Gen Z pursue side hustles that include freelancer or consulting work in addition to their regular, full-time work (Moran & Walsh, 2026). Gen Z seeks meaning in their work and will leave looking for it with 39% likely to look for a new job in 2024 as illustrated by Moran and Walsh (2026), "It's not that they don't want to work hard - as we can see from the popularity of side hustles - it's that they don't want to burn themselves out doing uninspiring work" (para. 28). In terms of seeking connection, Gen Z prefers alignment of their personal values with brands they follow or support and corporations they work for with 75% researching the societal impact of a company before they apply for a position (Milojevic & Pavlovic, 2025). Gen Z workers seek employment intentionally with personal values and balance of life and work in mind.

In regard to the dominant technological trend of our time, Artificial Intelligence (AI), 55% of Gen Z workers report using ChatGPT to solve problems at work (Milojevic & Pavlovic, 2024). According to Moran and Walsh (2026),

Gen Z are more likely to use tools like ChatGPT than average, but they're also less optimistic about AI's impact on their job. They've been told that "AI won't take their job,

somebody using AI will” and want to avoid that happening at all costs. Junior roles are seen to be the most at risk, and as businesses start baking AI into processes. (para. 30)

In the CAKE workforce report, Gen Z workers revealed that “39.7% feel neutral about AI, 25.9% feel positive about AI, and 20.7% have negative sentiments about AI” (Milojevic & Pavlovic, 2026, para. 21). Technology will remain a significant part of the lives of Gen Z workers.

Gen Z Teachers in the Workforce

Teachers make up a segment of the total Gen Z workforce. In 2020-2021 school year, the National Center for Education Statistics (2026) reported 3.8 million full and part time teachers in the public schools of the United States, divided among elementary and secondary teachers at 1.9 million each sector. In 2024, teachers made up 3.4% of the total U.S. workforce according to the U.S. Bureau of Labor Statistics (BLS). Teachers in their 40s made up most of the profession with Gen Z accounting for 18.4% as teachers under the age of 30 in 2022 (USA Facts, 2025). As a highly educated profession, teachers make up “approximately 8% of the college educated labor force, or nearly 5.4 million Americans, teaching in K-12 schools” which includes public schools, charter schools, and private schools of all persuasions (Huynh, 2024, para. 2). Despite this significant portion of the workforce, the teaching profession shows a decline in employment over the last 50 years with historic lows in the profession between 2010 and 2023. This decline may be explained as due to perceptions of occupational prestige, student interest in the profession, the number of pre-service teachers earning licenses, and overall job satisfaction of teachers surveyed (BLS, 2024). Smith et al. (2023) report “data from state-issued teaching licenses showed that 320,000 licenses were issued in 2006 compared to 215,000 in 2020, despite increasing enrollments in K-12 schools” (p. 4). In reference to these challenges, Lynch (2022) states “the

Educator Confidence Report by Houghton Mifflin Harcourt (HMH) indicates that teacher and administrator confidence in the teaching profession fell between 2020 (index of 49.0 out of 100) and 2022 (40.0), with some rebound in 2023 (42.0)” (pg. 5). A 2024 report from the Pew Research Center indicates that 67% of teachers in the classroom five years or less indicate they find their job fulfilling and 62% report it enjoyable (Schaeffer, 2024). Philogene (2025) suggests “a new generation of educators is stepping forward — driven by purpose, community and an unshakable belief that schools can be places of possibility” (para. 1). Gen Z brings renewed energy and innovation to the classrooms of the 21st Century despite challenges.

Gen Z Teacher Use of Technology in Their Professional Practice

Gen Z teachers demonstrate significant use of technology in their professional lives with it sometimes mixing into their personal lives. This generation grew up with computers and smartphones, finding themselves nearly always connected to the internet. Ninety-seven percent report using at least one major social media platform (Anderson & Jiang, 2018). In the Spring of 2020, Gen Z teachers found themselves just entering the education profession or still in classrooms, secondary or college, as schools across the world shutdown and transition to remote learning (Kansas Department of Education (KSDE), 2020). The experience impacted Gen Z teachers in a variety of ways which show up in their professional practice today. In the words of one Gen Z teacher, Jessica Mahoney (2024),

My journey is a blend of unique learning experiences that extend far beyond the confines of post-2020 trends. As both a facilitator and a product of these evolving educational landscapes, my perspective offers a nuanced understanding of technology’s role in the classroom — a perspective that transcends the boundaries of being just an educator; I am also a perpetual student in this ever-evolving digital realm. (para. 2)

As an example, and in retrospect, Mahoney (2024) recalled being taught how to use classroom technology properly and warned against Wikipedia. Later in college, a professor pivoted and taught the value of the footnotes in Wikipedia. These two experiences shape the way Mahoney (2024) teaches students about the complexities of ChatGPT and other AI programs. Technology remains a mainstay in classrooms, Lynch (2022) reported “65% of educators say tech solutions that connect instruction—including supplemental work and assessment on one platform—will be transformative to education.” The experience of Gen Z in using technology throughout their lives gives them built-in confidence to competently use it to their advantage in the classroom.

Gen Z teachers use the technological innovations designed over centuries as they teach. What makes Gen Z teachers different is the sheer amount of technological change occurring. Students, parents, colleagues, administrators, and communities expect Gen Z to keep up and be the experts due to their background with technology. Not just Gen Z, “68% percent of all teachers now report EdTech has become essential in the classroom” (Lynch, 2022, p. 14). Teachers today use the pencil as well as high tech, touch screen video boards. Students expect their teachers to use high-tech interactive learning tools, video conferencing apps and online assessment tools as they plan and execute lesson plans tailored to the needs of their students (Lynch, 2022). Communications of school staffs as well as communications between schools and families or the community involve technology as well. These technologies allow teachers greater workflow efficiency, innovation, experimentation, greater differentiation, improved student engagement due to anytime/anywhere access to content with online access (Lynch, 2022). The sheer number of technological advancements taken advantage of by Gen Z teachers, many without cognitively thinking about it, are staggering as seen in Table 1.1 which illustrates the

Table 1.1 Timeline of Technological Innovation Impacting Gen Z Teachers

Year of Invention or Release	Technological Innovation
1659	Magic Lantern – precursor of the slide projector
1795	Pencil
1801	Chalkboard
1888	Ballpoint Pen
1950s	Overhead Projector
1956	IBM invents the random access disk drive
1959	Photocopier
1967	Handheld Calculator
1971	First Email Message Sent
1973	TCP/IP protocols form foundation of internet
1976	Apple I Computer
1984	Apple Macintosh computer introduced
1984	Domain Name System (DNS) introduced
1991	Public Launch of the Internet
1994	Amazon founded
1995	Gen Z Begins
1995	Windows 95 introduced by Microsoft
1996	Hotmail – first web-based email
1997	Google founded
1998	PayPal introduced as an online payment system
2001	Wikipedia launched
2003	LinkedIn launched professional online networking
2004	Facebook launched
2005	YouTube launched for video sharing
2006	Twitter launched for microblogging
2007	iPhone revolutionized mobile phones
2010	Instagram launched
2011	Apple introduces Siri as a voice assistant
2012	Google Drive launched for cloud storage
2022	Chat GPT launched by OpenAI to introduce generative AI to the public

(Baraniuk, 2024; Chardonens, 2025; Huls, 2024; Lenihan, 2026; Seemiller & Grace, 2019a)

accumulated technologies impacting the classroom over the centuries and also highlights the incredible pace of technological change in the 21st Century. Table 1.1 demonstrates the number

and extent of technological hardware, software programs, social media, and now AI that Gen Z uses in the classroom for various purposes. Lynch (2025) quotes Francie Alexander with a glimmer of hope for the profession as “teachers are finding their rhythm again and seeing more student growth. Technology is playing a role in that recovery” (p. 6). Technology plays a significant part in the professional practice of Gen Z teachers.

AI is becoming more of a force in the lives of Gen Z and a complicated part of Gen Z and Gen Z teacher’s professional practice. Rose (2026) reported that

polling data shows that Gen Z [college] students and workers are a big part of the wider cultural backlash against AI. And even as they use these tools, vast swaths of young people are deeply acrimonious and even resentful of the AI-centric future that many feel is being forced on them. (para. 1)

Impacts on investments of AI companies in college curriculums, expectations of knowing how to use AI, and the conundrum of using AI but fearing the consequences worries Gen Z (Rose, 2026). A Gallop poll revealed sinking support for AI and that “even though 56% [of Gen Z] say tools help them finish work faster, eight in 10 now admit that using AI in this way makes actually learning more difficult in the future” (Rose, 2026, para. 9). As an example, Kos’myna et al. (2025) conducted a study in which participants used an AI assistant to write essays to measure the accumulation of cognitive debt. Cognitive debt is

a condition in which repeated reliance on external systems like Large Language Models (LLM) replaces the effortful cognitive processes required for independent thinking.

Cognitive debt defers mental effort in the short term but results in long-term costs, such as diminished critical inquiry. (Kos’myna et al., 2025, p. 151).

The three experimental groups (brain only, search engine aided, and LLM aided) showed significant differences in writing quality, recall of quotes later, sense of ownership of work, and diminished design of essays. Brain only showed the most connectivity according to brain scans with search engine aided second, followed by LLM aided (Kos'myna et al., 2026). As a result, the study's findings support "an educational model that delays AI integration until learners have engaged in sufficient self-driven cognitive effort" (Kos'myna et al., 2026, p. 151). Emerging research and measurements of Gen Z sentiment on AI show wariness of AI even as Gen Z uses it to complete tasks.

Some Gen Z teachers embrace AI to its fullest extent while others remain cautious. In regard to significant teacher use of AI in the classroom, Sparks (2026) reports how

Katrina Sacurom, a 5th grade teacher at Shawnee Trail Elementary in Frisco, Texas, has personalized her school's AI writing tool to mimic her own teaching style, questioning her students and encouraging them to be more reflective about their writing. "My kids like to joke that they have access to me whenever they want, because they think I speak very similarly to the way that the school AI speaks to them," she laughs. "I take it as a compliment." (para. 7)

Some Gen Z teachers see benefits of AI for personalized learning to improve academic performance with tutoring programs designed to meet specific student needs (Chardonnens, 2025). Challenges emerge as Gen Z teachers recognize the impact of AI on students' ability to regulate, plan, and control their own learning which results from the negative impacts of digital multitasking prevalent in Gen Z as a whole (Chardonnens, 2025). Chardonnens (2025) also recognized difficulties in ignoring distractions and a reduction in the depth of learning. All these drawbacks give pause to Gen Z teachers experiencing some of the same effects for themselves

and seeing it in their students. To accommodate for the challenges, Mahoney (2024) recalls their experience with Wikipedia in college and suggests

my goal is to provide students with clear guidelines on when and how to utilize ChatGPT. For instance, I often recommend the site to students struggling to grasp basic concepts discussed in class. Similar to the advice from my professors, I encourage students to use ChatGPT responses as a starting point for deeper exploration... I'm passionate about addressing ChatGPT use in this manner, particularly as a young teacher, because I understand that students will inevitably use such technologies regardless of classroom restrictions...Therefore, it's my responsibility as an educator to equip them with the skills to leverage technology beneficially, rather than simply demonizing it. (para. 11)

Reflecting on the role of technology in the classroom, Philogene (2025) observes that “Gen Z teachers are creators. They use technology intuitively and want to leverage it to help students thrive. Schools should invite them to pilot new tools, design lessons that use artificial intelligence responsibly and help shape digital learning policies” (para. 7). Gen Z teachers adopt and use technology at varying levels according to their professional needs and the needs of their students.

With all the focus on technology, some drawbacks emerge in the use of technology by Gen Z teachers. Gen Z perceives necessary cautions when using technology due to their immersion in technology from a young age inside and out of the classroom. Education policy, administrator expectations, and Gen Z teachers themselves set limits and regulations for their use of technology. The proximity of students in age to some of their Gen Z teachers leads to familiarity that may cross the lines of professionalism when students “friend” or “follow”

teachers on social media or follow them in online video games (Sparks, 2026). Sparks (2026) quotes

Megan Booth, a former high school principal and now a human resources supervisor for the Knox County, Tenn., public schools. “It’s so integrated into their lives to have an online presence that they don’t realize until it’s explicitly stated to them we have to separate our digital lives from our professional lives.” (para. 12)

Booth went on to maintain that professional development to train young teachers around technology etiquette and boundaries is necessary as “there are things that are OK to say or do in a traditional professional setting with adults, that are not OK to do or say in a school setting with children” (Sparks, 2026, para. 13). Gen Z teachers themselves also recognize the need to put guardrails on their use of social media. Emily Box, a Gen Z teacher on TikTok, states that social media allows them to showcase the “fun side of being a dance teacher” but balances that “with the challenge of maintain personal boundaries” (Spark, 2026, para. 14). To maintain those personal boundaries, Sparks (2026) reports that Box

allows students and parents to follow her public social media but won’t follow back or open message requests. And Box requires students and parents to sign off on an etiquette compact about the school app she uses to communicate about school clubs and teams.

They must agree to answer questions from their teacher promptly and with proper honorifics, and to ask questions only at set times of day. (para. 15)

Gen Z teachers feel it is their role to teach students about social media and AI in their classrooms (Sparks, 2026). Gen Z teachers recognize that regardless of their efforts, some students see events online that may not be age appropriate and want their students to explore the

internet and social media appropriately. Therefore, Gen Z teachers intentionally teach the good, the bad, and the ugly of technology to prepare their students for the future.

Research Problem

Each generational cohort experiences world events and changes in technology which shape their lives in multiple ways. Gen Z teachers teach in a very different world than when our public school system, so ubiquitous today, emerged at the turn of the 20th Century to answer the needs of industrial America. In the past, manufacturing required different skills and knowledge than our digital, online, and service driven economy of today. Leadership of those public schools emerged as a career path and continues to shape education at all levels today. To guide these public schools, people elect government bodies at the local, state, and federal level who pass laws, policies, and procedures which make up our education policy of today. All of these events shape the experience of teachers today, especially in regards to technology.

Research abounds in reference to teacher use of technology to plan, network, learn, and share ideas. Research on Gen Z includes many studies about the general impact of social media, how to understand Gen Z, how to teach them, how to work with them, and how to market to them (Flippen, 2017; Forbes Coaches Council, 2022; Seemiller & Grace, 2019a, Seemiller & Grace, 2024; Shaw, 2020; Twenge, 2023). Digital learning is synonymous with technology for Gen Z (Seemiller & Grace, 2019a). Twenge (2023) notes that Gen Z seeks to learn how to do things, understand the lives of their friends and family, as well as world events, all online. While Gen Z has been studied, high achieving Gen Z teachers and their use of technology in their professional practice and knowledge of education policy, as well as how they prefer administrators to use technology to lead, shows limited research. A review of literature revealed some research concerning the impact of technology on teacher professional practice in pedagogy.

Little research concerning how Gen Z teachers prefer education administrators use technology to lead or the use of technology to shape their knowledge of education policy surfaced. Research for this study relied, in part, on corporate studies produced by companies and business consulting firms for background information which indicates a significant need for research in public schools and other educational entities.

Purpose of the Research

The purpose of this research study is to explore how high achieving Gen Z teachers use technology to shape their professional practice and knowledge of education policy. This research further explored how Gen Z teachers prefer administrators to use technology when they lead.

Research Questions

Research questions for this study include:

RQ1: How do high achieving Generation Z teachers use technology to shape their professional practice?

RQ2: How do high achieving Generation Z teachers prefer administrators to use technology when they lead?

RQ3: How do high achieving Generation Z teachers use technology to shape their knowledge of education policy?

Conceptual Framework

Just-In-Time learning (JIT) allows learners to build on the fundamentals of knowledge, refresh their learning, and build on their experience as they need more information. Yilmaz et al. (2021) advise that “to navigate today’s work, knowledge is often accessed ‘just-in-time’ and through point-of-use resources. Consequently, the way we learn is changing” (p. 1). This is much like Gen Z teacher’s use of technology to seek and learn information in a quick and immediate

way using online technology to be used immediately. Ebbinghaus contended that people remember more when things have meaning and use what they learn (Nichols, 2025; Roediger, 1985). If Gen Z teachers do not use what they learn in professional development within a day, they begin to lose that information and retain less each day (Nichols, 2025). Learners need to use what they learn or connect with the necessity of it. Meaning increases with JIT learning as it allows people to learn efficiently because “they don’t want to waste time searching for the right information, especially at an urgent point of need” (Cloke, 2022, para. 2). In a world of quick access to information, Gen Z teachers take advantage of their resources to immediately find solutions and resources for their classroom and professional needs.

JIT may be defined in many ways depending on the context in which it occurs. Fellay (2024) defines JIT as an

individual and organizational approach to training employees that provides the right type of training at the right time. JIT delivers information *when* and *where* [emphasis in original] it’s needed - at the point of friction where employees are likely to make mistakes. (para. 4)

Due to the immediacy of the need to learn, learners using JIT increase retention to eventually use that knowledge in a similar situation in the future (Nichols, 2025). JIT reverses the tendency to forget what learners do not use as they use what they seek out because they start with a purpose. Yilmaz et al. (2021) discuss

“push” and “pull” resources: when learners are “pushed” a specific learning resource, an external entity (e.g., educator) is providing them with information, whereas when learners can “pull” a specific resource, they must have the ability to quickly access and find the resource independently, on demand. (p. 2)

JIT allows for meaningful, quality learning to occur at the time and place of the learner's choice to meet the immediate purpose for the moment.

JIT learning accommodates for easily distracted learners and those with difficulty in comprehending large collections of information (Cloke, 2022; Seemiller & Grace, 2019a). Cloke (2022) recommends “focused bursts of information and training that can be explored and completed in just a few minutes. When information is delivered in bite-sized chunks, your learners can absorb it quickly whenever they need to” (para. 17). These methods help “employees avoid information overload, access knowledge when they need it, and put what they're learning into practice immediately” (Fellay, 2024, para. 8). Employers who improve the use of technology, offer workers more autonomy, increase worker satisfaction as well as retention, manage change in their workforce, processes, and culture, as well as increase the knowledge retained from training dollars spent all benefit from JIT (Fellay, 2024). Over the years, the implementation of JIT continues to spread throughout various sectors of the economy as companies recognized its merits.

Benefits of Just-in-Time Learning

Employers, more specifically school districts, spend significant teacher time and money on professional learning and training. District staff go to great efforts to ensure professional learning days reflect relevance and useful sessions that school staffs need, yet to meet the diverse needs of all grade levels and content areas is difficult. Darad (2026) suggests JIT as a viable alternative because “just-in-time learning shifts employee training from pre-generated lessons about abstract potentialities to actual, relevant solutions that support your workforce in the moment of need” (para.3). Employers who made the investment in JIT found many benefits which include the following:

1. Enhanced employee performance (Cloke, 2022; ELM Learning, 2022; Northpass, 2022)
2. Faster learning for employees (Cloke, 2022; Northpass, 2022; Parmley, 2023)
3. Accessible 24 hours a day, where the learner is located, on a device they understand how to use (Cloke, 2022; ELM Learning, 2022; Northpass, 2022; Parmley, 2023)
4. Inexpensive relative to in-person training due to easy and speed to update (Cloke, 2022; ELM Learning, 2022; Parmley, 2023)
5. Increased retention of learning (Cloke, 2022; Parmley, 2023)
6. Engaged learners with access to relevant information (Cloke, 2022; ELM Learning, 2022) Darad (2026) elaborates that JIT “respects time, reduces friction, and improves real-world performance. It acknowledges that people don’t need more content – rather, they need the right support at just the right time” (para. 30).
7. Allows learner to choose their own path which encourages employees to search for solutions prior to interrupting a peer or waiting for a manager and results in a workforce that is “self-motivated, more engaged in their work, and more likely to retain information” (ELM Learning, 2022, para. 12).

The fast-paced rate of change in industry, research, education, and other parts of the economy is tempered by JIT as it gives employees more control of their education and career path.

Drawbacks of Just-in-Time Learning

JIT is not without its drawbacks, and these tend to discourage employers from implementing the system. Drawbacks of JIT include the following:

1. Significant investment of time – Determining how to offer the training (synchronous or asynchronous), length of lessons, topics to include or not include and the organization of included topics all need to be decided prior to development of the learning management

system or app. This takes time, research, and effort on the behalf of training staff and executives prior to launch (Parmley, 2023).

2. Expensive – Not just time, JIT requires a significant investment of money and human capital to implement ahead of any training which might then occur for employees. This includes additional time to keep the system updated (Northpass, 2022).
3. Worker motivation to learn varies – Workers may just not be motivated to learn independently despite the choices of how to learn, when to learn, what device to learn on, or topics from which to choose. Some learners need more direction, human instruction, and group settings to learn. JIT may not be best for all learners (Parmley, 2023).
4. Information overload – A significant friction point is information overload because “our working memory isn’t designed for this kind of digital firehouse” (Rebelo, 2026, para. 39).
5. Mastery of skill or content requires deep experience – Good execution of JIT rarely equals deep institutional knowledge or mastery of fundamentals as explained by Rebelo (2026), “reasoning separates what’s a good outcome from a bad one – and that usually requires experimentation, taking a course, or talking to experts in the field” (para. 41).

Employers must evaluate the costs and benefits of JIT to determine if a JIT learning system and/or learning management system of this depth and investment might be beneficial for their organization. This research study reviewed Gen Z teacher’s use of technology to address immediate issues through the lens of JIT learning.

Overview of the Research Design

This study was conducted as a descriptive qualitative research study. Working within the experience of Gen Z teachers (Bhattacharya, 2017), the value of the descriptive qualitative study

lies in the flexibility of methods for the researcher (Elliott & Timulak, 2021). Interview questions and an information checklist was used to collect demographic information on the teachers and their use of technology. The methodology of descriptive qualitative research as described by Elliott and Timulak (2021) was used to guide the study. First interviews were conducted with individual high achieving Gen Z teachers with follow up second interviews to clarify data collected in the first interview after coding and sorting the data into categories and preliminary themes (Elliott & Timulak, 2021). In addition, participants were asked to share with the researcher artifacts which depict the different apps, websites, and AI produced materials they used to shape their professional practice in regard to social media, teacher focused websites (TFWs), and AI. No artifacts were collected for research questions two and three, only interview data was collected to explore how high achieving Gen Z teachers prefer administrators to use technology when they lead and how technology shapes their knowledge of education policy.

Participants

Pre-Kindergarten (PK) through 12th Grade, high achieving Gen Z teachers (Kansas Horizon Award recipients) from throughout the state of Kansas were the population for this research due to their recognized excellence and experience in classrooms of the Kansas public school system (KSDE, 2024f). Sixty-five participants were invited from a pool of Kansas Horizon Award winning teachers, efforts were made to ensure all participants still were teachers of record in a classroom and fit into the Gen Z cohort. Thirteen Gen Z teachers answered the call for participants with 11 ultimately participating.

Kansas Horizon Award winning teachers apply through an application process following nomination by their school district (KSDE, 2024f). Each Kansas public school district is eligible

to nominate one elementary and one secondary teacher. The Kansas State Department of Education (KSDE) administers the program with the following eligibility criteria.

- Nominee will have successfully completed his or her first year of teaching in a pre-kindergarten through grade 12 Kansas school accredited by the Kansas State Board of Education.
- Nominee will be a full-time classroom teacher.
- Nominee will be responsible for the assessment of students, assignment of grades, preparation of lesson plans, parent-teacher conferences, discipline, attendance, and other daily educational tasks.
- Nominee will have performed in a way that distinguishes him or her from other novice teachers.
- Nominee will be selected by the school district superintendent and building principal. (KSDE, 2024f)

After nomination, teachers complete a rigorous application and selection process with up to 32 total teachers chosen statewide, split among the four U.S. congressional districts evenly with four elementary and four secondary teachers recognized at the Kansas Exemplary Educators Network (KEEN) conference each year in February (KSDE, 2024f). Committees of teachers, community members, and prior award winners serve on regional selection committees to determine the 32 finalists and the top candidate.

Data Collection

Data for this study was collected through a series of semi-structured interviews and documents such as social media posts, TFWs, and AI generated materials offered by Gen Z teachers. The researcher then sought meaning from the data. “Meaning is not discovered but

constructed...(as) subject and object emerge as partners in the generation of meaning” (Crotty, 1999, p. 9) which demonstrated the necessity of the researcher, with an insider view of the situation, who possesses the opportunity to understand participant perspectives and experiences with compassion and empathy in regard to the successes and challenges described in interviews (deMarrais & Lapan, 2014). The process of semi-structured interviews allows for the researcher to learn not only about the perspective of the participants but also about their own experiences which then gave more depth to the analysis of the data (deMarrais & Lapan, 2014). Respecting the hallmarks of qualitative research, the study was conducted with respect for participant confidentiality, comfort, competence, and value for their contribution to the study (Merriam & Tisdell, 2016). The researcher commits to retaining a high regard for participant privacy and anonymity at all times.

At the heart of this research study were semi-structured interviews conducted by the researcher in a respectful, private conversation using a video conferencing app. The time and setting was determined in a consensual manner by both researcher and participant. Special care was taken by the researcher to address a potential obstacle of familiarity between participant and researcher experience due to the researcher’s insider status in education.

To triangulate this data, the participants were asked to share social media posts, TFWs they use, and AI generated materials created for their classrooms or schools. This sharing of qualitative documents produced by edu-influencers and websites as well as the qualitative audiovisual and digital materials produced by the teachers themselves contributed to a deeper understanding of how technology shapes the professional practice of Gen Z teachers (Creswell & Creswell, 2018). Due to the prevalence of social media, online technology, and smartphone use amongst Gen Z teachers (Seemiller & Grace, 2019a), the researcher deemed it necessary to

inquire about and analyze the use of social media apps, TFWs, and AI models used in conjunct with the interviews conducted (Creswell & Creswell, 2018). Observations from the Information Checklist informed follow up questions of the research questions. These methods gave the researcher multiple sources to triangulate the data in order to “make our data richer and more nuanced and to bring out ambiguities and contradictions” (Elliott & Timulak, 2021, p. 29). A complex and deep research design ensured a tight and focused research study to explore how Gen Z teachers use technology to shape their professional practice.

An additional note on data collection is necessary due to the online nature of the social media or other technology-based data collected. Merriam and Tisdell (2016) acknowledge the value of data found online yet caution qualitative researchers to use caution. The lack of online access immediately excludes possible participants unable to use technology due to logistics (Marotzki et al., 2014; Merriam & Tisdell, 2016). When studying online data, Marotzki et al. (2014) differentiate between “static” and “dynamic” data. “Static data (1) are not created with different users interacting with each other and (2) remain basically unchanged while they are continuously accessible...classic homepages...available for long periods of time but are not usually altered through user interaction” (Marotzki, et al., 2014, p. 452). On the other hand, “‘dynamic data’ means data users generate in interactive contexts when they react with their own data to the data of other users...this would be information that has been picked up and republished while being changed in the process” (Marotzki et al., 2014, p. 453). This study focuses on the latter as social media and other technology-based data is online and offers a “low threshold for obtaining membership and deal primarily with weak ties between individuals (Marotzki et al., 2014, p. 457). The authors “emphasize actual networking, which aims at establishing new connections with strangers...the primary interest of users so far seems to be the

representation and nurturing of existing contacts” (Marotzki et al., 2014, p. 457). When researching social media and other technology-based data, Marotzki et al. (2014) suggest using discourse analysis, interview analysis or corpus analysis of textual data but with images they suggest a different method of analysis. Merriam and Tisdell (2016) offer advice for researchers “to recognize that the results of their research are strongly influenced by the characteristics of the data revealed, concealed, or altered because of the nature of the medium through which they are presented” (p. 186). Finally, both Marotzki et al., (2014) and Merriam and Tisdell (2016) caution the researcher to take great care to protect the identities of the participants as a back search of text may easily identify the source. The caution of the above authors also extends to respect proprietary information shared by influencers. The researcher considered these issues carefully and at length, then brought them forth in the design of procedures and the analysis of data.

Data Analysis

In descriptive qualitative research, data analysis differs from other qualitative data analysis in that the researcher converses with the data as it is transcribed and coded by asking questions about meaning and their own assumptions (Elliott & Timulak, 2021). The researcher designed research questions and interview questions with the intention of gaining access to the experiences of the participants and then went into the data to find patterns (Elliott & Timulak, 2021). An additional step in descriptive qualitative research involves not only the explicit investigation of the data but also an implicit investigation using the researcher’s insider status to infer meaning in the data which may not be in the transcript (Elliott & Timulak, 2021). The integration of a knowledgeable researcher makes this research methodology ideal for this study.

According to Saldaña (2021), it is important for the researcher to “read interview transcripts...that feature participant voices, attune (her)self to words, phrases that seem to call

for bolding, underlining, italicizing, highlighting, or vocal emphasis” (p. 139). The first cycle, in Vivo coding occurred after the transcription of the interviews by the researcher to reveal participant insights, key sentences, phrases, and quotes for coding illustrated as Quirks on the homepage (Elliott & Timulak, 2021; Saldaña, 2021). In Vivo coding ensured the voices of the high achieving Gen Z teachers were heard and initially brought out the detail needed to illustrate instances of professional practice, leadership interactions, and education policy in the transcripts of conversations. The program Quirkos was used to code data, sort the data into categories and eventually themes for all three research questions. For in Vivo coding, the words of the participants were highlighted and dragged onto the homepage to appear as a “Quirk” or circle. Each Quirk was labeled. If a code was similar to an established Quirk, the code was added to that Quirk which increased in size relative to the number of codes it contained.

In the second coding cycle, Pattern coding was used “since it identifies and links comparable contents” which makes it appropriate despite the caution by Saldaña (2021) who suggests using this coding method for “non-interview data” (p. 134). The inclusion of social media and other technology-based data such as apps and websites used by participants, and their description of how social media and other technology-based data shaped their professional practice justified the use of this coding method. Using the Quirkos program, the color of the Quirks were changed to color families as the codes developed into categories. Quirks were also moved into geographic areas of similar quirks on the homepages to form patterns of codes.

Elliott and Timulak (2021) encourage researchers to create graphics and organizational tools for clarity in the communication of data to the reader. Therefore, a third coding method of Code Landscaping was used due to the learning style of the researcher and a need for a third cycle to develop themes for all to see the entirety of the data in a visual form. Quirks gathered

into patterns and categories were then pulled into themes which were created from the words of the participants. Concept maps were created in Quirkos, some of which were three deep of categories. The themes create swirls of categories which pop out when hovered over to reveal the constituent themes. Analysis of the data extended from the interview transcripts to samples of social media posts, TFWs, and AI generated materials used, and examples of AI materials produced by participants.

Delimitations

According to Terrell (2023) “Delimitations are further limitations actively put into place by the researcher in order to control factors that might affect the results, or to focus more specifically on a problem” (p. 52). This study contains three delimitations. Participants who chose not to have their voice or likeness recorded using a video conferencing app were excluded. Also, excluded was any Gen Z teacher who did not speak English. Finally, a delimitation of this research consisted of the participant pool of Gen Z Kansas Horizon Award winners which is an elite group of teachers from a specific generation recognized for their excellence. This small participant pool represents the best teachers according to a defined selection process from first year teachers that year. The experience of this group of teachers is important to study to learn what shapes the professional practice of a young teacher who distinguishes themselves above their peers. In addition, it is important to study their preferences in regards to administrator use of technology when they lead due to the impact of technology and the growing influence it has on all aspects of schools. Finally, education policy shapes the professional practice and daily lives of Gen Z teachers who grew up in classrooms shaped by significant changes in policy and now teach in a time of increasing change. Technology is interwoven in all three research questions and the experience of high achieving Gen Z teachers is important to study as these

teachers excelled in their environment and learning about their professional practice, preferences for how administrators use technology when they lead, and knowledge of education policy may provide insight into best practices for all teachers. In the end, the experiences of this particular group of Gen Z teachers revealed significant themes of importance to the field of education highlighted by their commitment to the profession and professional excellence. The influence of technology on the professional practice of each high achieving Gen Z teacher and their use of social media, TFWs, or AI, their preference for how administrators use technology to lead, or how technology shapes knowledge of education policy could be different from the average Gen Z teacher.

Significance of the Study

Technology shapes the lives of Gen Z as it envelopes their communications, learning, decision making, and routines (Seemiller & Grace, 2019a; Szymkowviak et al., 2021; Twenge, 2023). From a young age, Gen Z learned to quickly go to apps on their smartphone or tablet to answer their questions (Seemiller & Grace, 2019a). This behavior in addition to the other internet-based technology used continues into adulthood and influences their professional practice regardless of profession (Anderson & Jiang, 2018; Lynch, 2022; Prestridge, 2019). With this constant flow of information at their fingertips, Gen Z finds more options for information, leadership, mentorship, and coaching than any other generation in history (Carpenter et al., 2020; Chuen, 2024; Prestridge, 2019). This access to unlimited outside information poses significant challenges to those training, mentoring, and leading teachers, especially Gen Z teachers (Carpenter et al., 2020; Macià & García, 2016). Technology influences the professional practice of all aspects of Gen Z classrooms whether it be lesson planning, classroom management,

communications, accommodations for special needs, classroom décor, or professional learning (Lynch, 2022). Gen Z teachers use technology to shape their professional practice.

Second, Gen Z teachers pose interesting challenges to education administrators looking to lead them as professionals in addition to their older peers (Chuen, 2024; Mann, 2023). New with social media, the contrast Gen Z teachers see online contrast between themselves and other teachers as well as the lives of their non-teacher peers causes some dissonance. Gone are the days when teachers just surrounded themselves with colleagues for mentorship and comparison, now teachers see the opportunities, exploits, and adventures of their non-teacher peers in a stream of information on social media apps (Mann, 2023; Seemiller & Grace, 2019a). This online, outside competition provides additional challenges for education administrators to meet the needs and expectations of Gen Z teachers in reference to time, communication, professional development, salary, benefits, and resources (Chuen, 2024; Mann, 2023; Papasotiriou, 2025). The wide range of options seen by Gen Z teachers online gives them perspectives on all aspects of their profession and contrasts that with their experience in the classroom.

Third, teachers with 30-year education careers gradually adapted to decades of education policy and its impact on public schools and classrooms. Gen Z teachers enter with the requirements of all that policy at the outstart (Mallik, 2021). This shapes their work environment, workday, and the expectations of communities, education administrators, parents, and more (Lindle, 2014). A study of all these factors – professional practice, preference for how administrators to use technology when they lead, and knowledge of education policy – in the midst of the use of technology by high achieving Gen Z teachers is necessary as it plays into the professional practice and the personal lives of the educators who make up the future of the education profession. This study provides research into the experience of high achieving Gen Z

teachers as they navigate their profession. In the end, the practical application of this study will be informational and applicable for education administrators, pre-service teacher educators, special interest groups, and policy makers at the local, state, and federal level, and Gen Z teachers to help them better understand themselves, as well as those who produce technology-based apps, content, and programs shaping the education profession.

Fourth, the participant pool itself is significant as high achieving Kansas Horizon Award winning teachers represent an innovative and exemplary segment of their generational cohort in the classroom. Their devotion to their schools, students, and the profession stand out which resulted in their recognition. Also, this participant pool gave the option for participants statewide, in all four congressional districts due to the selection criteria of the Kansas Horizon Award. This broad pool allowed for voices from several regions than just one region of the state or one school district.

Operational Definitions

Artificial Intelligence— “Artificial intelligence (AI) is technology that enables computers and machines to simulate human learning, comprehension, problem solving, decision making, creativity and autonomy” (Stryker & Kavlakoglu, n.d., para. 1).

Education Administrator – In Kansas, administrator means “any employee of a [school] board who is required to hold a school administrator's certificate, or who is designated in K.S.A. § 72-1134, or whose position the board determines to be administrative or supervisory in nature with responsibilities and remuneration comparable to those of certified administrators. The term administrator shall not mean or include a superintendent of schools” (K.S.A. § 72-2281).

Education Policy – “a set of principles or guidelines created to steer the actions and decisions of individuals, institutions, or even entire nations regarding education...encompass a broad range of

areas including curriculum design, school governance, teacher training, educational technology, and the allocation of resources...influencing what is taught, how it is taught, and who has access to education” (Teachers Institute, 2023)

Generation Z – Born between 1995 and 2010, Gen Z made up 20.69% of the U.S. population in 2024. In general, Generation X (Gen X) parented Generation Z (Seemiller & Grace, 2019a; Korhonen, 2024).

Leadership – “The activity of mobilizing people to make progress on really difficult (adaptive) challenges” (O’Malley & Cebula, 2015).

Professional practice – Teachers’ professional practice is “typified by a commitment to catering for the needs of an increasing diverse group of learners, the utilization of evidence-based pedagogies and professional collaboration with all education partners (both within the school and the wider community). Within this context there has been an increase in research focusing on innovations in teaching, learning and assessment and the broader professional context in which teachers work” (Faculty Office, Faculty of Education and Health Sciences, n.d.).

Social media – “refers to websites and applications that focus on communication, community-based input, interaction, content sharing and collaboration” (Hanna and Lutkevich, 2025, para.2).

Teacher – “Full time classroom teacher responsible for the assessment of students, assignment of grades, preparation of lesson plans, parent-teacher conferences, discipline, attendance, and other daily educational tasks” (KSDE, 2024f).

Teacher Focused Website – An app or website designed primarily for the use of teachers in the classroom or a version of a broader program with a special aspect for educational use. This also includes content focused websites used by teachers to meet curriculum standards and/or the needs of learners in their classrooms.

Technology – As defined by Merriam-Webster (Merriam-Webster, n.d. – b): “the practical application of scientific knowledge especially in a particular area; a manner of accomplishing a task especially using technical processes, methods, or knowledge (technologies for information storage)”.

Chapter Summary

High achieving Gen Z teachers, Kansas Horizon Award winners, use technology to their advantage in their daily personal as well as professional lives (KSDE, 2024f). Social media apps, TFWs, and AI all shape the professional practice of Gen Z teachers (Lynch, 2022). As a growing part of the U.S. workforce, Gen Z, in general, expects more work-life balance than those generations before them (Morgan & Walsh, 2026). Therefore, time spent at work must have purpose (Milojevic & Pavlovic, 2025). Gen Z uses technology to ensure efficient use of their time (Morgan & Walsh, 2025). Social media apps, TFWs, and AI all contribute to this need to use time in productive ways (Lynch, 2022). AI, in particular, offers complexities for Gen Z teachers to consider as they approach this expanding technology (Morgan & Walsh, 2025). Gen Z teachers take advantage of technology as they practice JIT to attain the knowledge or resources sought just as they need them. The skills gained in a childhood spent on screens and smartphones allows Gen Z to efficiently use and gain from JIT (Clope, 2022; Nichols, 2025; Northpass, 2022; Shaw, 2020; Yilmaz et al., 2021). Drawbacks of JIT include too many options or choices revealed from a #hashtag search, search engine or AI inquiry (Parmley, 2023, Rebelo, 2026). Another noteworthy drawback, the shallow depth of quick access versus the deep learning of research and experience needed for critical thinking and analysis (Rebelo, 2026). Using descriptive qualitative research inquiry, the researcher took advantage of the experience of Gen Z teachers as well as their own experiences in the classroom (Elliott & Timulak, 2021).

Participants in the study came from the pool of Kansas Horizon Award winning teacher in Kansas who fit the Gen Z generational profile (KSDE, 2024f). Eleven teachers answered the call for research and gave of their time for two semi-structured qualitative interviews and shared artifacts reflecting their use of technology in the classroom. Analysis of the interviews commenced with in Vivo coding for the first cycle of coding using Quirkos, an online qualitative analysis software program. The second cycle used pattern coding with final coding using code landscaping which resulted in colorful Quirks mapped into categories and then combined into themes (Quirkos, 2026; Saldaña, 2021). The significance of this study offers insights for all stakeholders of public education and an analysis of how Gen Z teachers use technology to shape their professional practice and knowledge of education policy. This research further explored how Gen Z teachers prefer administrators to use technology when they lead.

Chapter 2 - Literature Review

This literature review provides an overview of generational cohort development (Mannheim, 1928/1955; Strauss & Howe, 1991), Generation Z (Seemiller & Grace, 2019a; Shaw, 2020; Twenge, 2023), previous generations influence on Gen Z (Seemiller & Grace, 2019a; Shaw, 2020; Strauss & Howe, 1991; Twenge, 2023). The understanding of generational research, cohorts, and the effects of generations over time impacts Gen Z teachers in the classroom today. Technology plays an important part in the lives of Gen Z teachers which is highlighted in the research on social media (Seemiller & Grace, 2019a; Shaw, 2020) and educator use of social media (Carpenter et al., 2020; Carpenter et al., 2023; Macía & García, 2026; Prestridge, 2019; Shelton et al., 2024). Important to the lives of Gen Z teachers, leadership and the way leaders show up impacts their professional practice and their personal lives. The study of how Gen Z teachers prefer administrators to use technology when they lead adds depth to the discussion of this study (Chuen, 2024; Fellay, 2025; Mann, 2023; Yadav & Chaudhari, 2024). A discussion of educators without a subsequent discussion of government involvement in the policy, procedures, and expectations of elected officials charged with education oversight of this integral part of communities lacks cohesion (KSDE, 2024d; KSDE, 2024e; U.S. Department of Education (DED), 2024b). The discussion of oversight leads into a more focused discussion of education policy on the local, state, and federal levels of government and their actions on budgets and policy (Fullan, 2016; Lindle, 2014; Yeban, 2024). Finally, a discussion on policy must include the influences of institutes, think tanks, and special interest groups (Dunlap & Jacques, 2013; Greenhaigh et al., 2021; Malin & Lubienski, 2015; Rechhow, 2021; Rodesiler, 2017). The combination of these ideas and topics offers a deep discussion of how high achieving Gen Z teachers use technology to shape their professional practice and knowledge of education

policy. This research further explored how Gen Z teachers prefer administrators to use technology when they lead.

Generational Cohort Development

The ability to define the human experience at different age periods and with varied reactions to events due to multiple factors took on new meaning in the last century. A working definition of generation, according to Kupperschmidt (2000), is “an identifiable group (cohort) that shares birth years, age location, and significant life events at critical developmental stages (times) divided by five to seven years into first wave, core group, and last wave” (p. 66). Rather than waves, Shaw (2020) referred to “cusps” where generational overlap may occur. Twenge (2023) focused on the impact of technology rather than events. The time and place of a person’s birth makes a difference in the life they may lead with events early in life impacting the perception of later events (Kupperschmidt, 2000; Mannheim, 1928/1952; Shaw, 2020; Strauss & Howe, 1991; Twenge, 2023). The German Sociologist Karl Mannheim (1928/1952) sought to synthesize the research from as far back as David Hume’s political philosophy which discussed the continuity of governments from mid-18th Century Scotland to the more current research of his day coming from various European academics (Mannheim, 1928/1952). Mannheim (1928/1952) cited significant life events experienced by the multitudes at a young age as significant in their lived experience throughout the course of their life. The classical theories of generational research began with Karl Mannheim in the 1920s who described “generational units” bonded by common experiences (Mannheim, 1928/1952). Later, the sociologist Glen Elder discussed the differences between age groups who experienced the same event with his research focusing on the Great Depression (Twenge, 2023). These researchers, among others, laid the groundwork for additional contributions toward the end of the 20th Century.

The 1990s brought new seminal research as major world events and the horrors of war impacted millions of people. Strauss and Howe (1991) describe age groups as “generational diagonals” which break out into four stages of life – childhood, young adulthood, midlife, and old age – through which each generational diagonal progresses. Strauss and Howe (1991) researched the past 18 generations of Americans to examine the current living generations as of 1991 and predicted future trends into the 2060s. Using the research of Strauss and Howe (1991), other researchers, academics, think tanks, and consultants; businesses continue to seek ways to understand different generations in terms of politics, marketing, recruitment, retention, views on the environment, cultural change, educational preferences, and more (Dimock, 2023; Kopperschmidt, 2000; Mahmoud et al., 2021; Noble & Schewe, 2003; Seemiller & Grace, 2024; Twenge, 2010; Twenge, 2023; Wiedmer, 2015). The research of today stretches from qualitative studies to quantitative studies to anecdotal evidence in the media (Cennamo & Gardner, 2008; Peterson, 2023; Rudolph et al., 2020; Tidhar, 2021). Regardless of method, it is important to study generations to seek understanding of how society changes, encourage the use of best practices in employment and education, and glimpse expectations for the future.

Different generations face different challenges and offer different perspectives and solutions as they advance through their lives. Challenges include major historical events, technological changes, or reactions to actions of a previous generation acting as parents. Shaw (2020) discussed “ghost stories” of generations in terms of the impact of world events, technological innovations, and cultural shifts on later generations. Some researchers focused on using the data attributed to various generations to the advantage of employers and teachers to better serve various generations in the workforce and school settings to ensure the best support offered for success (Seemiller & Grace, 2019a). Twenge (2023) suggested technology, not major

events, as the cause of differences between generations with their research focused on the rise of individualism and how fast each generation grows up. The literature available today offers many insights on the manner of research, use of data, definition of generational year boundaries, and the positive and negative implications of using generational data. Seemiller and Grace (2024) emphasize that

by understanding what has shaped one's experiences during a formative time of human development, it may be easier to appreciate and embrace generational differences and provide a context that can help in making larger scale decisions regarding policy, practices, curriculum development, programs, and initiatives that target an entire demographic of individuals. (p. 2)

Due to the global reach of social media and its interconnectedness with Gen Z, Seemiller and Grace (2024) collaborated with researchers from around the world to explore all aspects of the lives of Gen Z from characteristics and motivations to communications to families and relationships to money management to civil engagement to societal concerns in an effort to capture the experience of this generation.

Gen Z

Gen Z births began in 1995 and ended in 2010 and consist of 70 million members which make up 20.69% of the current U.S. population (Korhonen, 2024; Seemiller & Grace, 2019a; Twenge, 2023). Economic downturns and upturns, historic political division, the COVID-19 pandemic, and technological innovations significantly impact this cohort (Flippin, 2017; Seemiller & Grace, 2019a; Shaw, 2020; Twenge, 2023). This generation knows nothing but a world with the internet (Seemiller & Grace, 2019a; Shaw, 2020) and “there was never a time when social media didn't exist and they view life through their smartphones and tablets, sharing

music, photos, news, and opinions as easily as they breathe and eat” (Flippin, 2017, p. 6). In 1995, companies such as MSN, Match.com, and eBay all started as Microsoft released Windows 95 (Seemiller & Grace, 2019a, Twenge, 2023). National and world economic, political, and cultural events impacted and continue to influence this generation in many ways.

Characteristics of Gen Z

Researched since they were children, several researchers described the characteristics of Gen Z. Flippin (2017) suggests Gen Z is “self-aware, self-sufficient, inventive, objective-oriented, motivated, creative, hardworking, practical, maturity, and a sense of justice” (p. 7). In their “slow life theory”, Twenge (2023) gives evidence that finds Gen Z less likely to engage in drinking alcohol, dating, working for pay, engaging in sex, fighting with their parents, running away from home, or taking physical risks such as driving cars or fighting with their peers. Seemiller and Grace (2019a) found many of the traits listed above but also focused on loyalty. Flippin (2017) offers advice for both Gen Z employees and their employers as they seek realism rather than optimism with more of them going into science, technology, and engineering (Flippin, 2017; Shaw, 2020). A desire to contribute in a significant way drives Gen Z to volunteer more and seek to be a part of the solution with little sense of entitlement.

Significant Events During Lives of Gen Z

Significant events during Gen Z’s lifespan impact their perspective. The oldest of Gen Z found themselves in kindergarten classes on September 11, 2001, with some of their parents deployed for the War on Terror for the next 20 years (Seemiller & Grace, 2019a; Shaw, 2020). Early in 2002, Congress passed the No Child Left Behind Act of 2001 (NCLB) which increased the federal government’s role in public education and replaced the Elementary and Secondary Schools Act of 1965 (ESEA) (No Child Left Behind Act, 2001; White Housed, n.d. - a.). NCLB

began an era in public education of mandatory state assessments, increased funding, accountability measured by subgroups in schools with goals to raise achievement scores and close the achievement gap with schools sanctioned schools who did not meet the standards set (Darling-Hammond, 2007; White House, n.d. - a). NCLB required teachers to be “highly qualified” ensuring students at all schools a qualified teacher with failing schools forced to reorganize or close, and states to developed complex plans to respond to all aspects of the law (Darling-Hammond, 2007; No Child Left Behind Act, 2001). Gen Z felt the intended and unintended consequences of this law. Critics of NCLB claimed,

the law’s focus on complicated tallies of multiple-choice-test scores has dumbed down the curriculum, fostered a ‘drill and kill’ approach to teaching, mistakenly labeled successful schools as failing, driven teachers and middle-class students out of public schools and harmed special education students and English-language learners through inappropriate assessments and efforts to push out low-scoring students in order to boost scores. (Darling-Hammond, 2007, para. 6)

Unintended consequences of NCLB included unfunded mandates for the cost of compliance, loss or reduction of non-tested subject area courses such as art, science, music, social studies, and further division of schools between those in high poverty areas and the suburbs (Darling-Hammond, 2007). The last year of Gen Z started kindergarten as the Obama Administration and Congress replaced NCLB with the Every Student Succeeds Act of 2015 (ESSA) which reauthorized ESEA and upheld protections for students who struggle due to high academic or personal needs or disadvantages, expanded funding and support to preschool programs, required high academic standards, and continued accountability but in different forms which include easy to understand state report cards and transparent communications with parents (DED, 2024c). Gen

Z teachers not only know their experience in classrooms impacted by NCLB but now seek teach in an era of ESSA.

In Spring 2020, the COVID-19 pandemic forced the shutdown of most schools. Gen Z found themselves learning remotely on video-conferencing applications with their teachers to end the semester. The oldest members started their professional careers online which included some of the first Gen Z teachers as they student taught or taught one of their first years in the classroom online (Seemiller & Grace, 2019a; Shaw, 2020; Twenge, 2023). The COVID-19 pandemic and the aftermath left a legacy of mental health issues, changed the economy, and deepened political division in the U.S. and around the world (Seemiller & Grace, 2024; Twenge, 2023). The COVID-19 pandemic disrupted schools, learning, and other significant parts of the lives of Gen Z and their families and remains an influence of their life experience.

Gen Z and Smart Phones

Smart phones influence Gen Z more than any generation prior as they find technology critical to their way of life as they conduct much of their lives online as they tap to search, learn, post, and chat (Flippin, 2017; Seemiller & Grace, 2019a). This fast paced, instant communication lowered the attention span of Gen Z to eight seconds compared to Millennials at 12 seconds (Shaw, 2020). An example of current parenting trends, Gen Z's parents keep track of them, with little resistance, using apps with Global Positioning Systems (GPS) to show their location (Seemiller & Grace, 2019a) as opposed to their parents' analog childhoods with less supervision due to both parents working (Twenge, 2023). Today, smart phones allow people to pay from their phone and bank online (Seemiller & Grace, 2019a). Gen Z uses smartphones to react quickly when witnessing events and to show their support of or opposition to ideas, people, or

situations seen in their social media feeds as well as using a variety of apps on their smartphones to negotiate communications.

Previous Generations Influence on Gen Z

Five previous generations influenced the lives of Gen Z. The politics and policies of the 20th Century carry into their lives as Silent generation leaders, such as former President Joseph R. Biden, Jr. (b. 1942), Speaker of the House Emerita Nancy Pelosi (b. 1940), and former Senate Minority Leader Mitch McConnell (b. 1942), impacted politics, legislation, and the decision making of the federal government much of their lives (Pelosi, 2024; McConnell, n.d.; White House Historical Association, 2024). These Silent Generation leaders represent just 4.92% of the U.S. population today yet held significant positions of power most of Gen Z's lifespan (Korhonen, 2024; Schaeffer, 2023). Baby Boomers represent 20.9% of the U.S. population and continue to make up a majority of the U.S. Congress despite recent gains of younger generations (Schaeffer, 2023). In 2022, Florida's 10th Congressional District elected the first member of Gen Z to the U.S House of Representatives, Maxwell Alejandro Frost (Ruiz, 2022). The 2024 election saw a 170% increase in Gen Z representatives elected to public office (Future Caucus, 2024). While living in the shadow of previous generations of legislative action, young Gen Z candidates run for office and are winning in greater numbers each election.

The Supreme Court of the United States (SCOTUS) currently consists of five Baby Boomer justices which include Chief Justice John Roberts and four Gen X members who replaced members of the Silent Generation (Supreme Court of the United States, n.d.). SCOTUS cases decided during the lifetime of Gen Z impact their rights and lives (Twenge, 2023). In *McDonald et al. v. City of Chicago, Illinois, et al.*(2010), SCOTUS upheld and expanded *District of Columbia v. Heller*(2008), when it used the Fourteenth Amendment to incorporate the Second

Amendment as a right to bear arms for the purpose of self-defense applicable to the states with Justice Samuel Alito describing the Second Amendment as “fundamental to the Nation’s scheme of ordered liberty...deeply rooted in the Nation’s history and tradition” (*District of Columbia v. Heller*, 2008; *McDonald et al. v. City of Chicago, Illinois, et al.*, 2010, para. 3). In the case, *National Federation of Independent Business v. Sebelius* (2012), SCOTUS upheld the 2010 Patient Protection and Affordable Care Act (also known as the Affordable Care Act, the ACA, or Obamacare) but not the mandated expansion of Medicaid to all the states (*National Federation of Independent Business v. Kathleen Sebelius, Secretary of Health and Human Services, et al.*, 2012). The decision in *Obergefell vs. Hodges* (2015) “ruled that states may not ‘bar same-sex couples from marriage on the same terms as accorded to couples of the opposite sex’” (*Obergefell v. Hodges*, 2015). In an executive order by then President Barack Obama in 2012, he addressed the immigration status of children brought to the U.S. as children. He ordered

the U.S. Department of Homeland Security (DHS) adopted a program—known as the Deferred Action for Childhood Arrivals (DACA)—to postpone the deportation of undocumented immigrants who had been brought to the United States as children and to assign them work permits allowing them to obtain social security numbers, pay taxes, and become part of “mainstream” society in the United States. (*Department of Homeland Security v. Regents of the University of California*, 2020, para. 1)

In 2017, the Trump Administration attempted to phase out DACA, but supporters of DACA challenged in the Supreme Court. In the case, *Department of Homeland Security et al. v. Regents of the University of California et al.* (2020) involved undocumented minor immigrants. SCOTUS ruled the case reviewable and in violation of the Administrative Procedure Act in a 5-4 decision to keep the program in place (*Department of Homeland Security v. Regents of the University of*

California, 2020, para. 1). Recently, in *Dobbs, State Health Officer of the Mississippi Department of Health, et al. v. Jackson Women’s Health Organization et al. (2022)*, SCOTUS held, “The Constitution does not confer a right to abortion; Roe and Casey are overruled; and the authority to regulate abortion is returned to the people and their elected representatives” (Dobbs, State Health Officer of the Mississippi Department of Health, et al. v. Jackson Women’s Health Organization et al., 2022, p.1). These cases impact the culture, politics, economics, and lives of Gen Z as well as the political landscape of a nation deeply divided during the 2024 presidential election (Ballotpedia, 2024). This election and decisions by SCOTUS will impact the lives of Gen Z in the future.

Today, the American economy depends on large national and multinational businesses. The leaders of those businesses make decisions which impact Gen Z. The Fortune 500 from 2023 lists 267 of the 505 Chief Executive Officers (CEOs) as Gen X, 226 as Baby Boomers, five as Silent Generation, and seven as Millennials (Berger, 2023). In 2023, according to Future Caucus (2024), 66 Gen Z members held office in state legislatures across the U.S. Not to be underestimated, the shadow of the GI Generation with its “Ghost Stories” of the Great Depression, World War II, the migration of the U.S. population from farms to the city and then to the suburbs continues to influence policy and the economy (Shaw, 2020). Gen Z enters into the workforce and public service with their desire to change the world (Berger, 2023; Flippin, 2017; Seemiller & Grace, 2019a; Twenge, 2023). Gen Z will no doubt impact the culture, economics, and politics of the United States.

Gen X, and elder Millennials, make up the parents of Gen Z (Seemiller & Grace, 2019a; Twenge, 2023). The beliefs, perceptions, and actions of these parents impact the lives of their

children. An example from Twenge (2023) illustrates the differences between the world Gen X grew up in and that of their children.

School-aged children, who once roamed their neighborhoods and walked home from school by themselves, are instead carefully supervised by adults at nearly every moment. Gen X parents who rode bikes for miles around their childhood hometowns became reluctant to let their own children have the same freedom. (p. 375)

The example goes on to talk about an eight-year-old picked up by the police while walking the family dog due to a call by a neighbor. Illinois state law in 2018 made it illegal to leave a child alone if under age 15 (Twenge, 2023). Examples like this illustrate the changes in culture and policy from the childhoods of Gen X parents to those of their children.

Terrorist acts, changes to education, health issues, and shifts in culture shape Gen Z. In 2021, Colorado and the state of Washington legalized recreational marijuana. To date, the status of the legality of marijuana reflects conflict between federal and state law. Twenty-four states and the District of Columbia fully legalized marijuana use. In four states, it remains fully illegal. Seven states allow medical use with decriminalization, eight allow medical use, two decriminalize it, and seven allow cannabidiol (CBD) and tetrahydrocannabinol (THC) only (DISA Global Solutions, Inc., 2024). Further, the Opioid Epidemic killed more than 130 people per day in 2023 (Health Resources and Services Administration, 2023). Spring of 2020, the COVID-19 pandemic shut down the world (Shaw, 2020). Internationally, China grew into the biggest economic threat and global competitor for the U.S. (Shaw, 2020). Challenges abound as Gen Z moves into their careers and lives as adults.

In a nation sharply divided by politics, Gen Z finds itself non-partisan on issues concerning the environment and climate change (Seemiller & Grace, 2019a). In 2016, Gen Z

witnessed Hillary Clinton, former New York Senator and Secretary of State under President Obama, nominated by a major party for president (The Office of Hillary Rodham Clinton, 2025). The #MeToo movement moved “millions of people to participate in a women’s march in one of 653 cities in the U.S. and 261 cities around the world” (Seemiller & Grace, 2019a, p. 252) on January 21, 2017 (Chenowith & Pressman, 2017). The Washington Post estimated 4,157,894 people marched that day in the United States alone, over one percent of the population. (Chenowith & Pressman, 2017). In 2020, the U.S. elected the first female, Black, and South Asian vice president, Kamala Harris who later ran for President in 2024 (Shaw, 2020; Whitehouse.org, n.d.). Despite political breakthroughs, gender equality in opportunity and pay continues as a concern of many in Gen Z, not just women (Seemiller & Grace, 2019a; Twenge, 2023). The 2016 election revealed a schism in beliefs and opinions about the issues discussed which leaves our nation divided today into two very different groups with different values, different expectations, and sometimes acknowledgment of different facts (Twenge, 2023). This divide challenges Gen Z as it continues as it moves into positions of political, economic, and social leadership.

Previous generations deride political correctness yet Gen Z “believes that insensitivity is not just rude but mean” (Shaw, 2020, p. 137; Papasotiriou, 2026). As students, employees, and acting as consumers, Gen Z believes colleges, workplaces, businesses, and other institutions need to issue trigger warnings if an event or content might make someone experience negative effects (Twenge, 2023). Not just requests, Gen Z supports brands that reflect their values, serves as online influencers for these brands, chooses their jobs, and demands company and university stock portfolios to reflect their values (Shaw, 2020). The need to be open minded and see the world through multiple perspectives extends to religion as well (Seemiller & Grace, 2019a). The

numbers of people belonging to organized religion dropped over the past few generations and continues with Gen Z who wants their churches to reflect their values (Seemiller & Grace, 2019a; Twenge, 2023). One notable reversal of this open mindedness plays out on college campuses as Gen Z seeks to restrict speech opposing their viewpoints citing not just their physical safety, but that their emotional safety deserves protection as well (Twenge, 2023). With a generational desire to make an impact on their world, expect change in multiple areas of life from Gen Z.

Social Media

The complex nature of social media makes it challenging to define. Treem et al. (2016) acknowledged that the vast types of technology used as well as the activities performed on social media apps reflect the difficulty defining it because it is “not defined by any specific scope, format, topic, audience, or source” (p. 3). However, Merriam-Webster (n.d. - a) defines social media as “forms of electronic communication (such as websites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other such content (such as videos)” (para. 1). The American Psychological Association (2025) goes on to define social media as “forms of digital communication through which users create online communities to share information, ideas, personal messages, and other content” (para. 1). These definitions reflect the functions of social media, yet the many types of platforms also provide a challenge to the definition of social media for the researcher. In their review of the literature related to social media from 1994 to 2019, Aichner et al. (2021) recognized that social media refers to an “umbrella term that describes a variety of online platforms, including blogs, business networks, collaborative projects, enterprise social networks, forums, microblogs, photo sharing, products review, social bookmarking, social

gaming, social networking, video sharing, and virtual worlds” (p. 215). This broad array of platforms must be limited to focus this research of the study. For clarity, the researcher used the definition provided by Hanna and Lutkevich (2025), “Social media refers to websites and applications that focus on communication, community-based input, interaction, content sharing and collaboration” (para.2). The platforms studied were limited to applications Gen Z teachers use to shape their professional practice which excludes sites for entertainment, gaming, business review, and virtual reality, among others.

Intentional Use of Social Media Platforms by Gen Z

Technology and social media influence every aspect of life for Gen Z, especially communication. Shaw (2020) explains the various methods of communications with the following examples:

- Phone calls go to family and close friends.
- Facebook offers family, professional and community connections.
- Texting connects large, informal groups in group chats.
- Snapchat connects more intimate, small groups of friends.
- X (formerly Twitter) gives a forum for offering and viewing opinions.
- Instagram offers more informal updates, a forum for opinions, news, etc.

Various video services serve different purposes, TikTok (short duration), YouTube (longer duration), and streaming services such as Netflix (full length films and documentaries) entertain, educate, offer reviews, and keep Gen Z up to date on current events (Shaw, 2020). Instagram, with its newsfeed, reels, and messaging capabilities, reigns as the dominant peer-to-peer communication app for Gen Z who navigates it with skill and efficiency (Ray, 2023; Shaw, 2020; Shelton et al., 2020). Gen Z expects online access to friends, family, mentors, and

businesses as they use multiple apps to their advantage as they navigate society, the economy, and the workplace.

Existing in what Stillman and Stillman (2017) refer to as “Phigital”, a mix of the physical world and digital world. Gen Z balances learning through YouTube videos, online searches, and online sources offered by teachers or researched by students and more traditional learning environments (Seemiller & Grace, 2019b). Students of this generation learn alone together which means they like to collaborate or gather in the same physical space yet work individually on their devices (Seemiller & Grace, 2019b). Gen Z expects to connect with each other and adults, including teachers, in a variety of mediums. Apps such as Remind allow teachers and students to communicate without exchanging phone numbers (Seemiller & Grace, 2019b). Skype, Google Hangouts, and Zoom video conferencing apps open up opportunities for online and hybrid learning with human connections online rather than in person (Seemiller & Grace, 2016a; Seemiller & Grace, 2019b). The skills and experiences as students in the classroom prepares Gen Z to be lifelong learners in college and in the workforce due to their comfort communicating, learning, and working online (Katz et al., 2021). This expectation leads to differences in learning and working between generations.

Educator Use of Social Media

For many teachers, Gen Z and otherwise, “the use of social media for self-generating professional learning through their online professional learning networks becomes embedded in their daily routine, which improved their teaching practice and their own understanding of the relevant content or pedagogy” (Prestridge, 2019, p. 145). Educators use social media for personal and professional opportunities to network, seek resources, improve classroom practices, find colleagues interested in similar content or ideologies, and to influence their peers (Carpenter et

al., 2020; Carpenter et al., 2023; Prestridge, 2019). Given the schedule of teachers, the flexibility and accessibility of social media opportunities 24 hours a day gives educators a chance to join various communities of teachers and network with those of similar interest which offers significant advantages over fixed delivery professional development (Prestridge, 2019). Day et al. (2006) pose

If identity is a key influencing factor on teachers' sense of purpose, self-efficacy, motivation, commitment, job satisfaction and effectiveness, then investigation of those factors which influence positively and negatively, the contexts in which these occur and the consequences for practice, is essential. (p. 601)

The development of a professional identity as a teacher evolves from the student identities pre-service teachers hold and proves critical in the first few years to teacher retention (Carpenter et al., 2020; Carpenter et al., 2023; Carpenter & Morrison, 2018; Hong et al., 2018). The development of this identity comes through experience and new learning done with colleagues, at school district provided professional development, and online in self-directed learning through social media (Prestridge, 2019). The professional and personal identities of Gen Z educators mix at times with varying consequences.

Educators use social media for professional learning utilizing many different platforms, among these Facebook, Instagram, X (formerly Twitter), Pinterest, TeachersPayTeachers (TPT), Reddit, and Tik Tok (Carpenter & Harvey, 2019; Carpenter et al., 2022; Prestridge, 2019; Shelton et al., 2020). Gen Z learned as adolescents the value of online and social media learning first using their parents' devices and later their own (Seemiller & Grace, 2019a; Szymkowiak et al., 2021). Szymkowiak et al. (2021) describe the youngest teachers as

not more intelligent or smarter and does not know more than the other generations; young people today just have multiple sources of information and know how to use them the right way, and in addition, how to do this incredibly fast. (p. 2)

Hernandez-de-Menendez et al. (2020) discuss a “knowledge society” which “implies social transformation in which citizens need not only knowledge but also new skills and competencies” (p. 847). Gen Z knows nothing but the knowledge society which includes the internet. As teachers, Gen Z teachers prepare students for a world and occupations not invented at the time students attend their classes (Hernandez-de-Menendez et al., 2020). Their intuitive understanding of the challenges young people face gives them greater insight into the struggles of their students.

Educators of all generations use social media for professional development (Carpenter & Krutka, 2014; Carpenter et al., 2020; Carpenter et al., 2022; Macià & García, 2016; Shelton et al., 2020). Today, and in years past, participation in formal professional development on site and in schools with in-person district trainers or outside experts brought in consists of professional development done to teachers. The expansion of online learning and social media increases the options for teachers seeking colleagues of equal enthusiasm, background, and interest in their profession. Today, teachers demonstrate curiosity, consume and produce significant advice, resources, exemplars, and collaborative activities online through social media sites such as Facebook, X (formerly Twitter), Instagram, wikis, blogs, YouTube, TPT, Pinterest and others (Carpenter et al., 2020; Macià & García, 2016; Prestridge, 2019; Shelton et al., 2020). Online and social media learning influences Gen Z and other teachers with future impacts unknown.

Social Media and Education Influencers

Over time, some social media users master the art and science of influencing their peers on various sites with some monetizing their efforts. These “edu-influencers” as defined by Shelton et al. (2020) consist of “individuals who have achieved microcelebrity status in spaces such as Instagram, Twitter, YouTube, Facebook, Pinterest, and TeachersPayTeachers.com (TPT) by promoting certain education-related products, philosophies, or practices” (p. 530). These micro-celebrities and social media edu-influencers engage in a different aspect of leadership as they attract large followings, promote themselves and other influencers by gaining attention and endorsing products or programs (Carpenter et al., 2023; Cotter, 2019; Shelton et al., 2024). The full impact of this phenomenon in education is still to be discovered.

The teacher-to-teacher online marketplace of ideas (TOMI) refers to the online spaces discussed by researchers where teachers gather or search for ideas (Shelton et al., 2024). Much like other careers, edu-influencers seek to profit through their efforts to promote and disrupt the system by sharing intimate parts of their professional and private lives yet find themselves subject to their preferred platform’s accompanying algorithms (Cotter, 2019). These people offer a public service at times when they rally support for causes, connect people of similar interests in crises such as the shutdown of schools during the COVID-19 Pandemic, and help new teachers survive their first year of teaching (Carpenter et al., 2023). On the other hand, the internet offers little regulation or filters to ensure promotion of proven, quality, research-based teaching advice and questions the ethics of edu-influencers selling products or processes for profit which they may or may not personally use (Carpenter et al., 2023). As edu-influencers monetize their social media posts, questions of “the tension that exists between notions of teaching as a public good and the monetization of teaching through the use of for-profit social media platforms” (Carpenter

et al., 2023, p. 753). Education social media influencers bring new ideas along with new, sometimes conflicting, values and motives to the profession.

In light of expert teacher participation in social media, Prestridge (2019) offers three conflictual interpretations to explain expert participation which they refer to as “protectionism”, “niche”, and “exhausting”. Protectionism refers to a reluctance to share resources due to the previous time and resources invested. Niche refers to the competitive instinct and effort used to outdo other teachers with inventive approaches or denigrating the ideas of others. Exhausting refers to the time and effort spent seeking recognition on social media which may result in unintended consequences and losses elsewhere in the teachers personal or professional life (Prestridge, 2019). These ulterior motives lie beneath the marketplace of ideas floating through teacher social media relationships.

Challenges of Teacher-to-Teacher Online Marketplace of Ideas

The profit incentive of TOMI lures teachers but the TOMI’s commercial nature challenges the long-held notion of educational materials as a public good (Williamson & Hogan, 2020). Some question the neoliberal stance (running education systems as free markets) and express concerns about the interplay of this approach with increasing online entrepreneurial opportunities in education today (Shelton et al., 2024). For example, the major player in TOMI in 2019, TPT,

hosted 4,018,173 classroom resources from 208,748 educator-sellers with 1.5 billion all-time downloads and \$3.9 billion in sales...69% of all downloads were free (no cost) resources...81% of total sales were attributed to the top 1% of educator-sellers. (Koehler et al., 2020, p. 1)

The top sellers identify as white women with advanced degrees which indicates expertise, but the lack of vetting still leaves a concern for quality of resources (Shelton et al., 2024). Teachers on TPT use many other formats to drive traffic to their TPT site for monetization (Shelton et al., 2024). For example, a teacherpreneur posts short quick snippets to raise awareness on Instagram, critiques a source on Reddit, collaborates with teacher followers on Facebook, posts a demonstration video on Tik Tok to advertise and drive traffic to their YouTube channel for the full video of the lesson, organizes content on Pinterest each time linking to TPT to make a profit on their endeavors (Shelton et al., 2024). These networks allow teacherpreneurs to become leaders in education and curriculum without a check on rigor, quality, or philosophical influence concerning issues of diversity (Shelton et al., 2024). In light of issues of low teacher pay highlighted by recent strikes, the profit motive for teachers remains high with “moonlighting” by working extra jobs, not a new notion for educators (Shelton et al., 2024). Overall, influences on changes in curriculum, teacher involvement in curriculum, the intended power of the traditional curriculum structure foretells significant reform in the future due to online alternatives.

How Gen Z Prefers to be Led

A part of the Gen Z teacher’s life. building leaders and the district office influence their workplace and professional practice. Therefore, a part of the story must be not only how technology influences their professional development, but also the influence of the building and district leaders use technology when they lead. Employers looking to lead Gen Z need to consider the unique characteristics of this generation entering the workforce. If care is not taken when “harnessing if not managed effectively, there are higher chances of conflict, frustration, blame game, misunderstanding, and consequently, decreased performance effectiveness among

the multi-generational work teams” (Yadav & Chaudhari, 2024, p. 338). In that effort, these younger employees sometimes surprise their older colleagues with their demands to be heard and taken seriously as they offer ideas, opinions, and make requests for assignments and privileges which go beyond what previous generations may dared to ask for at the start of their careers (Chuen, 2024). Gen Z seeks to be a change agent in their workplace and the world as they disrupt industries and human causes with their new perspectives (Chuen, 2024). Known for entrepreneurship, they operate outside the box, founding businesses with not only traditional business models but also a social entrepreneurship model ensuring alignment with their values. (Chuen, 2024; Mann, 2023; Papasotiriou, 2025; Seemiller & Grace, 2019a). Yadav and Chaudhari (2024) discuss the need to identify behavior preferences, accept those preferences rather than fight to change them as leaders to develop organizations and facilitate the career progression of employees. These preferences include behaviors surrounding the use of technology as administrators lead.

Following the innovations and causes of others online, Gen Z seeks to change their world and give meaning to their work in socially conscious ways by supporting brands that meet their expectations of values and purpose (Chuen, 2024; Mann, 2023; Papasotiriou, 2025; Seemiller & Grace, 2019a). To support these personal purposes, Gen Z uses their devices and social media connections to lead, follow, and influence their world.

Communication dominates the lives of Gen Z as they value the input of others whether it be online or at the workplace. This generation seeks consistent, constant feedback from their peers and supervisors (Chuen, 2024). They expect access online through apps on their phone to those who supervise them expecting to receive constant and consistent feedback regardless of time or place which satisfies their shorter attention span as well to keep them motivated and on

track (Chuen, 2024; Fellay, 2025; Mann, 2023). Through technology, Gen Z expects leaders that listening “to everyone without bias and understanding the perspective and point of view of every team member will not just help in fostering healthy professional relationships but will also improve performance, productivity, and interpersonal relationships” (Yadav & Chaudhari, 2024, p. 350). Whether a post online or their performance at work, Gen Z seeks constant feedback from those around them.

Gen Z seeks out and appreciates mentoring and coaching of their supervisors or older peers as they navigate the workplace. They seek to move up quickly which makes programs to mentor them critical to their retention at the workplace (Chuen, 2024; Yadav & Chaudhari, 2024). In research from Fellay (2025), 82% of Gen Z employees surveyed indicated they love to work for employers who offer programs to guide them in their career path. These programs must include regular, specific, and constructive feedback which acknowledges successes or suggestions for improvements intended to lead to personal growth through lifelong learning objectives (Papasotiriou, 2025; Seemiller & Grace, 2019). Gen Z expects intentional feedback which fits the purpose of the companies they work for and aligns to their personal values in support of their careers.

Relevance is important to Gen Z as they embrace their workplace and support brands. They expect authenticity, transparency, and inclusivity of a variety of people in their workplace (Chuen, 2024; Mann, 2023; Papasotiriou, 2025). In the absence of explicit purpose, Gen Z may adopt a product or campaign to meet their need for relevance (Papasotiriou, 2025). As a whole, Gen Z prefers to work in groups even if working together, alone (Seemiller & Grace, 2019b). Expect groups or organizations that Gen Z supports to lead with empathy and represent a variety of political, intellectual, and cultural perspectives (Mann, 2023). As the first minority majority

generation in American history, Gen Z expects their workplace to look and feel like the classrooms they grew up and learned in with multiple perspectives and groups of people represented (USA Facts Team, 2024). The expectation of alignment of purpose, employer, brand, causes, and more offers challenges for older generations more inclined to conform rather than disrupt.

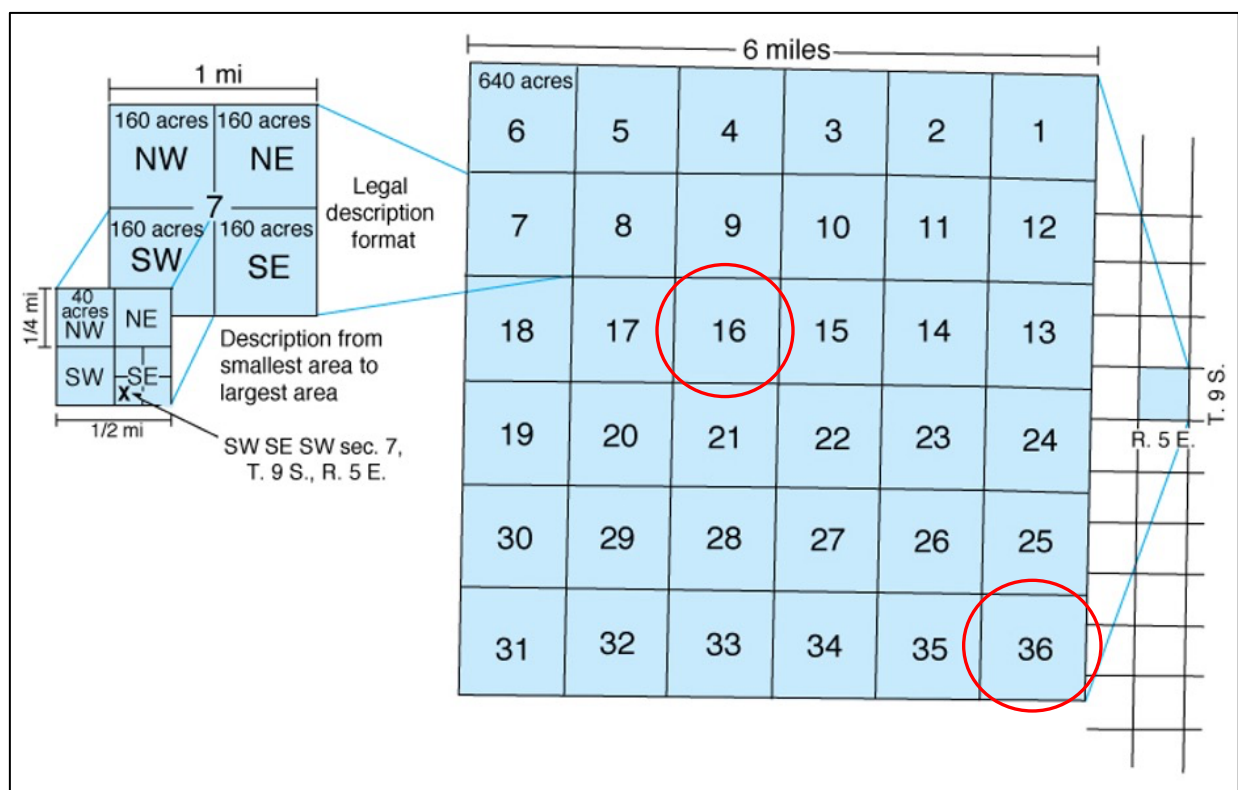
Not a generation to just sit back and let others deal with issues, Gen Z enjoys the challenge of a problem. Problem solving to learn or to make progress or find a solution feeds into the purpose driven lives of Gen Z (Chuen, 2024; Papasotiriou, 2025). Collaborative environments for learning and working allow for collective approaches which increase efficiency, reduce wasted time, and support balance between work and personal lives (Chuen, 2024; Mann, 2023). Flexible work options appeal in multiple ways to Gen Z. Their seamless existence in two worlds, in person and online, leads to expectations by Gen Z to work in that same manner (Seemiller & Grace, 2019a). Gen Z prefers autonomy over micromanagement and working to the objective in their own creative way, not by a strict set of rules (Mann, 2023; Yadav & Chaudhari, 2024). Work-life balance dominates the decision making of Gen Z as they navigate learning or their workplace, placing a higher value on their physical and mental health than previous generations (Mann, 2023). Overall, Gen Z appreciates leadership in their workplaces and learning experiences that values their creativity, autonomy, inclusion of many perspectives, and ensures their work-life balance favors their mental and physical health.

Education Oversight

From the establishment of the state of Kansas, founders of the state placed a high value on public education. In the Ordinance and Preamble, writers of the Constitution of the State of Kansas allocated land for public schools. These allocations allowed for common school location

placements as well as money to establish common schools from the sale of land (State Library of Kansas, 2013b). Kansas uses the U.S. Public Land Survey System (PLSS) to divide the state into counties, counties into townships, and townships into sections and subsections off land as seen in Figure 2.1 (Kansas Geological Survey, 2002). The Northwest Ordinance, one of the last acts of the Articles of Confederation prior to the Constitutional

Figure 2.1. Illustration of Survey Division of Land and Sections Set Aside for Public Schools



Convention in 1787, defines the method to survey acquired land in the United States (National Archives, 2022b). This system organizes land into six square mile townships consisting of 36 one-mile square sections. Federal lands granted to states required a portion to be set aside for public schools (Kober, 2020). In Kansas, the state constitution sets aside Sections 16 and 36 (highlighted in Figure 2.2) to establish a location for sale to provide revenue or to build upon for

common schools. In addition, 72 sections of land were granted by the state to establish a state university (State Library of Kansas, 2013b). This all occurred prior to the federal Morrill Act (1862) which granted 30,000 acres of land grants to establish public universities and colleges that focused on agriculture and mechanical arts such as Kansas State University in Manhattan, Kansas (Department of Chemistry, 2023; National Archives, 2022a). The State of Kansas set aside 500,000 acres of land for common schools at its conception. To fund these institutions, the Kansas set aside 5% of the proceeds from the sale of public lands to establish a fund (State Library of Kansas, 2013b). The allocation of land and funds for common schools indicates a deep commitment and value for public education opportunities in Kansas.

Education Provisions in the Constitution of the State of Kansas

In Article 6 of the Kansas State Constitution, the state sets out the responsibility of the state legislature to establish and maintain public schools and to “provide for intellectual, educational, vocational, and scientific improvement” (State Library of Kansas, 2013a, para. 1). Article 6 also defines the system of governance as well as governing bodies for public education in Kansas as divided PK through 12th grade education and post-secondary education (State Library of Kansas, 2013a). The Kansas State Board of Education governs PK through 12th grade public and some accredited non-public schools. To govern post-secondary education, the Kansas Constitution set up the Kansas Board of Regents. At the local level, elected school boards govern Kansas public schools (State Library of Kansas, 2013a). Today, these levels of government continue to influence public education in Kansas.

Kansas State Board of Education

The Kansas State Board of Education (KSBOE) consists of 10 members, each representing four contiguous Kansas Senate districts, in the beginning, and still serves

overlapping four-year terms (KSDE, 2024d). Today, Kansas apportions the 10 KSBOE districts by population. The mission of KSBOE, “is to prepare Kansas students for lifelong success through rigorous, quality academic instruction, career training and character development according to each student’s gifts and talents” (KSDE, 2024d, para. 2). KSBOE governs PK-12 education and appoints the Kansas Commissioner of Education to lead KSDE as its executive director (KSDE, 2024d). The KSBOE provides guidance and policy statewide which influences local school board actions.

Kansas Department of Education

KSDE supports and governs public schools and some aspects of non-public schools in Kansas through data and research-based and strategies. The Commissioner of Education provides overall leadership for KSDE and directs two different divisions, Fiscal and Administrative Services and Learning Services (KSDE, 2024a). Commissioner responsibilities include communications; legal compliance at the federal, state, and local level; legal services, human resources, and education staff recognition programs such as the Kansas Teacher of the Year (KTOY) program and the Kansas Horizon Award program (KSDE, 2024a). The KSDE Division of Fiscal and Administrative Services works with the Kansas Legislature on all financial aspects of budgets, audits, fiscal notes on legislation, nutrition programs, and computer services pertaining to local school district funding and KSDE services (KSDE, 2024c). The KSDE Division of Learning Services fulfills multiple services for Kansas school districts, teachers, administrators, students, and families (KSDE, 2024e). These services include licensure of teachers as well as building and district administrators; curriculum standards; administering federal and state support programs; special education; early childhood programs; career and technical education; school accreditation; disadvantaged, migrant and limited English proficient

student programs; staff development programs; school improvements plans and coaching; research data from state assessments, agency reports; and interpretation of data and guidance for programs from DED and other outside sources (KSDE, 2024e). The breadth of programs and influences of KSDE provides significant oversight and influence in local school districts and some accredited private schools.

United States Department of Education

DED establishes policy for a wide variety of education programs ranging from providing services to support elementary and secondary schools; ensuring opportunities for students from disadvantaged backgrounds; offering professional development for teachers and other school staff; supporting multilingual education, civil rights enforcement, and special education; issuing student loan assistance for college and career opportunities; funding for college and university research; and supporting pipeline programs for educational areas with staff shortages to name a few (DED, 2024b). Just the DED’s “elementary and secondary programs annually serve nearly 18,200 school districts and over 50 million students attending roughly 98,000 public schools and 32,000 private schools...and provides grant, loan, work-study assistance to more than 12 million post-secondary students” (DED, 2024b, para.10). The Biden Administration requested \$82.4 billion for DED in the 2025 federal budget (DED, 2024a). To put the education budget into perspective, the defense budget totaled \$805 billion with the total non-defense spending portion of the federal budget totaling \$917 billion (Ready, et al., 2024c). Of that non-defense spending, \$131 billion went to veterans’ benefits with the next highest category of \$125 billion budgeted for education, training, and employment services (Ready et al., 2024a). Of that \$125 billion, \$79.6 billion went to DED (Ready et al., 2024a). This allocates to the DED the third highest budget of the executive departments behind the mandatory \$3.8 trillion spent in the Department

of Health and Human Services on Medicare and Medicaid, debt interest, and a few other programs as well as the Department of Defense (Ready et al., 2024b). The investment of tax dollars in the United States on education indicates the importance of an educated citizenry to the functioning of our government (DED, 2024b).

Education Policy

Influences abound for education policy. To put the role of the Gen Z teacher into policy, Heineke et al. (2015) researched the importance of teachers as policy actors, who are “not passive policy targets, but active policy agents who make daily decisions when implementing policy in practice in attempt to meet the needs of diverse students” (p. 383). Surrounding Gen Z teachers, education policy “consists of the principles and government policies in the educational sphere as well as the collection of laws and rules that govern the operation of education systems” (Mallik, 2021, p. 1). In regards to government oversight of education, Fullan (2016) explains “Governments can push *accountability*, provide incentives (pressure and supports), and/or foster capacity building” [*italics in original*] (p. 209). These three options may occur at the local, state, or federal government or a combination of all three at the same time. At present, social media and technology influences all three levels of government from multiple angles. In 2014, Lindle offers a glimpse of the impact social media and technology may have on schools in the future using disruption theory from Christensen (2006) “Disruptions are social trends that shift society’s understanding of how things work, and in effect, force new practices as a matter of surviving the new normal” (p. 173). The concern of Lindle (2014) refers to the use of social media by students which may cause “local schools to lose the ability to have direct impact on what students learn because of students’ connections to social media and other ways of learning” (p. 173). In one of the scenarios used to educate the principals and superintendents reading their

book, Lindle (2014) discussed the impact of parents using social media to influence school board decisions through social media used to connect parents, share updates, and support an agenda, philosophy, or policy. These local examples show the ways people use social media to influence education policy, and the use of similar techniques is seen at the state and federal level as well. The influence of social media extends to non-profits, legacy media (public and for-profit), interest groups, foundations, think tanks, and more using social media to connect and update their members, the public, and to sway education policy and elections which effect that policy.

At the local level, district school boards govern schools and provide expectations for teachers, staff, and students (National School Boards Association, 2023; Rodesiler, 2017). “As the single largest job provider in rural areas and small towns, district governance and leadership can quickly become major centers of political intrigue” according to Lindle (2014, p. 62). In Kansas, school boards are defined as a

governing body of a unified school district is and shall be a board of education composed of seven (7) members, except as is specifically otherwise provided in K.S.A. 72-1210.

The members may be elected by any combination of method of election and voting plan authorized by law, and shall serve for a term of four (4) years. (K.S.A. § 72-1072)

Nationwide, “over 100,000 board members govern nearly 15,000 districts and they constitute the largest group of elected officials in the U.S.” (Lindle, 2014, p. 62). Fullan (2016) provided examples of studies which indicated that the elected nature of school boards lends them to members who receive little training and may be unprepared for all aspects of their role.

Recommendations for professional development training as well as state guidance in various areas of policy may lead to successful boards which are better prepared to work with school and district personnel on issues from funding to curriculum to teacher hiring and retention to

graduation requirements (Fullan, 2016). Federal laws such as No Child Left Behind (NCLB) in 2009, Race to the Top (R2T) in 2010, and in the introduction of Common Core curriculum standards by state governors and state education commissioners weakened local control (Lindle, 2014) but the COVID-19 pandemic and subsequent school shutdowns reinvigorated movements by parents to influence local school boards and their child's school (D'Souza, 2025; Klein, 2021; Rodrigues, 2024). The mix of influences continues at all levels of government, especially local school boards who oversee public schools in communities across America.

Local control of the public schools happens with school boards who approve policies for their school districts and schools in all manner of topics, including policies on social media. One example of a social media policy from a large Central Plains school district states that

These guidelines address employees' use of publicly available social media networks including (but not limited to) personal Web sites, Blogs (Blogger, WordPress, etc.), Wikis, Social Networks (including Facebook, LinkedIn, Twitter), Photo and Video Sharing sites (YouTube, Instagram, Flickr, etc.), online forums and virtual worlds. **The District takes no position on employees' decisions to participate in the use of social media networks for personal use on personal time. However, use of these media for personal use during District time or on District equipment is prohibited.** (Bold in original text) (Wichita Public Schools, 2020)

The site goes on to offer "General Rules to Follow" recommending awareness of the status of teachers as role models, discouraging the friending of students and parents, using common sense and following FERPA, protecting confidential information, respecting the law, minding one's own safety, as well as recommending staff report abuse (Wichita Public Schools, 2020). In light of concerns expressed by Carpenter et al. (2023) about teachers spending more time on social

media influencing other teachers than focusing on their own classroom, the district cautions “Don’t forget your day job” (Wichita Public Schools, 2020). The district then clarifies guidelines if an employee posts on behalf of the school district and how to create pages for schools and activities, not profiles, and demands that if pages are created the employee maintains them (Wichita Public Schools, 2020). Finally, the district provides safety and privacy tips. In the literature search for guidance for districts from professional organizations, only teacher union guidance surfaced. In the acknowledgement of this district’s policy, no school board or school administrator organizations are credited. This lack of guidance may be indicative of the challenges of writing and enforcing social media policies at the local government level.

Education policy at the state level is led by state school boards, chief state school officers, or executive level secretaries in each state (Railey, 2017). According to Yeban (2024), state level boards and officials set policy for “maintaining and operating public schools, establishing and selecting public school curricula, regulating teaching methods and instructional materials, deciding on educational funding and special education programs, setting standards for teacher qualifications” (para. 28). Teacher evaluations and re-licensure are also regulated at the state level with the adoption of “teacher evaluation systems, which use observation data from instruments such as the Danielson Framework and student test scores to make high-stakes judgments related to teachers” (Heineke et al., 2015, p. 382). States determine parameters for professional development, standards to attain and renew licensure and/or advance on a salary scale. The hours spent on social media learning, interacting, collaborating, and celebrating teachers rarely counts towards the necessary requirements for teacher credentialing through current education policy (Prestridge, 2019). This may change in the future due to the prevalence of learning online and through social media.

Facing challenges with cell phones and other screen devices in the classroom, states such as Kansas recently set up taskforces to determine recommendations for student screen time. Schaefer (2024) reported 72% of high school teachers indicate cell phones as a significant distraction to students with all grade levels citing an issue. The Kansas task force used Jonathan Haidt's (2024) book *The Anxious Generation: How the Great Rewriting of Childhood is Causing an Epidemic of Mental Illness* as a guiding text. Members of the taskforce made recommendations to the Kansas State Board of Education regarding parent access to school devices and content accessed, acceptable use policies, balancing digital and non-digital learning, digital citizenship education, shared research on the impact of social media on students, and suggested school districts implement bell-to-bell policies for phone-free schools at the elementary, middle, and high school levels, to name a few (KSDE, 2024b). State education policy effects the lives and future of students and teachers more than other levels of government, with local government using state policy as guidance on issues.

At the federal level, landmark laws influence education policy. The Children's Internet Protection Act (CIPA) requires public school districts to develop and enforce acceptable use policies or it disqualifies them from discounts for computer equipment (Rodesiler, 2017). Acceptable use policies intend to restrict content harmful to minors. The Federal Educational Rights and Privacy Act (FERPA) protects student records and requires parent or guardian permission before a school releases student records (Rodesiler, 2017). Federal policy impacts all students in the United States and teachers in classrooms but only at very high levels.

Influence on Education Policy by Institutes, Think Tanks, and Interest Groups

Social media influence on state and local education comes from people inside the system as well as those outside the system. At times, social media and other influences, such as special

interest groups outside the system, make significant impacts on education policy (Reckhow et al., 2021). Reckhow et al. (2021) developed a conceptual framework which shows “the organizational and financial infrastructure that links research, ideas, and advocacy in politics, but specific mentions of research in testimony are not a factor” (p. 1). Although this research focused on the topic of teacher evaluation, the research process described questions about the influence of special interest groups in testimony and on the discussion in the social media sphere (Reckhow et al., 2021). Special interest groups influence the online public discourse about education.

As social media influencers continue to push out content, more people see their work. The attention garnered by these influencers drives special interest groups and think tanks to follow suit with their own particular education ideology (Malin & Lubienski, 2015). Malin and Lubienski (2015) sought clarity on who influences education policy: higher education experts or active teachers or public education-focused organizations or others. Researchers and active educators note a lack of clarity between research in the field and the policies debated and passed by elected officials (Tseng, 2012; Weiss, 1995). Malin and Lubienski (2015) suggest a different set of values exist between the aforementioned groups. Following the success of education social media influencers, institutes, think tanks, and special interest groups use media strategies to push their own ideologies and agendas which at times contradict current professional education research (Malin & Lubienski, 2015). The lack of regulation and the open nature of the internet allows for any group to voice an opinion on education policy.

As a parallel example, in their work on climate change, Dunlap and Jacques (2013) report concerns that critics of climate change establish institutes and think tanks that then advocate through non-peer reviewed research and self-published or non-reviewed books. These

organizations house scholars said to possess some expertise on the matter and then focus on getting their view out into the media and policymaking discussions through op-eds, testimony, books, etc. (Dunlap & Jacques, 2013). Parallel concerns in the public discourse concerning education policy exist in the literature. Malin and Lubienski (2015) found that individuals with less expertise can often have greater success in media penetration. In their study, Malin and Lubienski (2015) “were able to identify individuals listed as educational experts at four major policy outfits: the conservative Heritage Foundation, the conservative American Enterprise Institute (AEI), the libertarian Cato Institute, and the union-funded Economic Policy Institute (EPI)” (p. 7). Efforts by these special interest groups impact education policy in state legislatures and the U.S. Congress which then ripples to thousands of schools, educators, and students. The lack of connection between some ideologies and the research base on effective best practices in education and policy significantly impacts the PK-12 through higher education systems.

Use of Social Media to Influence Education Policy

As social media grows, the policies of local governing entities such as school boards grows (Rodesiler, 2017). Research on the constraints placed on social media for informal teacher professional development remains limited, but policies abound concerning online teacher connections with students (Rodesiler, 2017). Warnick et al. (2014) identifies in three categories which

justify in taking action against teachers when evidence emerges from social networking sites that teachers are (a) doing something that is illegal, (b) doing something that reflects badly on their strictly professional judgments and attitudes, or (c) pursuing or contacting students in a way that makes the students uncomfortable. (p. 771)

Implementation of social media policies governing teacher online interactions must balance the constitutional right to freedom of speech with protections for students, colleagues, schools, and school districts which may vary depending on the values of the community (Rodesiler, 2017).

Two common policies governing teacher use of social media include “(a) prohibition of using the district network for personal business and (b) prohibition of disclosing student education records without consent” (Rodesiler, 2017, p. 296). Local school boards gain from the publicity posted through teacher updates on social media which leads to a need to balance guidelines for posting material which includes students and/or identifying information. Finally, issues arise when teachers mix personal updates with professional posts on the same social media account (Rodesiler, 2017). Local school boards balance a mandate for the safety of students and staff with the right of teachers to express their ideas, experiences, etc. as an individual citizen.

Greenhaigh et al. (2021) researched and discussed the influence of policy at the local and state level on the use of social media by teachers. Using counts of hashtag posts, teachers in states with higher student-to-teacher ratios and free-and-reduced lunches tend to post more messages. Activity on educational hashtags mirrors the political divide in America today. Left-leaning states and regions reveal fewer social media posts with an increase in activity in right-leaning states (Greenhaigh et al., 2021). Educators use of social media hashtags to focus and organize activism in response to local, state, and region education policy (Greenhaigh et al., 2021). Hashtags promote teacher participation in advocacy and protests for higher pay, lower student-to-teacher ratios, poor funding for professional development, and budget cuts to classroom resources (Greenhaigh et al., 2021). According to Greenhaigh et al. (2021), the perception of “a lack of appreciation and emotional support for teachers drives education activism on Twitter” (p. 2030). Teachers make political decisions based on multiple factors but

social media sites such as Instagram allow for more targeted advocacy. It remains to be seen if new sites such as Bluesky and Threads will fill a similar role.

Chapter Summary

The literature review explored generational cohort development (Mannheim, 1928/1955); Strauss & Howe, 1991), Generation Z (Seemiller & Grace, 2019a; Shaw, 2020; Twenge, 2023), previous generations influence on Gen Z (Seemiller & Grace, 2019a; Shaw, 2020; Strauss & Howe, 1991), social media (Hanna & Lutkevich, 2025; Shaw, 2020; Seemiller & Grace, 2019a), educator use of social media (Carpenter et al., 2020; Carpenter et al., 2023; Macià & García, 2016; Prestridge, 2019; Shelton et al., 2024), how Gen Z prefers to be led (Chuen, 2024; Fellay, 2025; Mann, 2023; Yadav & Chaudhari, 2024), education oversight (DED, 2024b; KSDE, 2024d, KSDE, 2024e), education policy (Fullan, 2016; Lindle, 2014; Yeban, 2024), and influences on education policy by institutes, think tanks, and interest groups (Dunlap & Jacques, 2013; Greenhaigh et al., 2021; Malin & Lubienski, 2015; Rechhow, 2021; Rodesiler, 2017).

Gen Z lives their lives in the physical and the online world seeking out purpose and mission in their careers as well as in the ways they spend their time and money (Seemiller & Grace, 2019a; Shaw, 2020; Stillman & Stillman). Living in the shadow of generations from the Silent Generation to the Millennials, Gen Z lives with government policy and court decisions made by public servants of previous generations (Shaw, 2020). Recently, Gen Z began to win seats at the local, state, and federal levels of government (Future Caucus, 2024). Driven by purpose and seeking to be change agents, Gen Z enters public education as the youngest generation teaching in schools today (USA Facts, 2025). These young teachers see the world differently due to their exposure to the internet and social media all their lives (Shaw, 2020). Despite claims by older generations, these teachers remain as committed as previous generations

to serving communities and ensuring students possess the skills to fulfill their potential (Twenge, 2023). Gen Z prefers to be led with authenticity, transparency, and inclusivity through mentorship and online access to their leaders (Mann, 2023; Papasotiriou, 2025; Seemiller & Grace, 2019a). When looking for employers, Gen Z seeks out companies and entities that fit their values and expectations of work-life balance (Chuen, 2024). Although Gen Z finds purpose in teaching, they confront challenges as they encounter education policy, funding limits, and circumstances which challenge their work-life balance expectations.

Oversight of education budgets, policy, and procedure comes from all levels of government – local, state and federal – which provides funding and support for public schools yet due to the political nature of politics and elections, funding and policy may vary (KSDE, 2024d; KSDE, 2024e). Many stakeholders influence education policy which includes parents, communities, special interest groups, elected officials and more (Malin & Lubienski, 2015; Rechhow, 2021; Rodesiler, 2017). Encompassing the entirety of this literature review, this study explored how high achieving Gen Z teachers use technology to shape their professional practice and knowledge of education policy. This research further explored how Gen Z teachers prefer administrators to use technology when they lead.

Chapter 3 - Methodology

Within this chapter, aspects of the generic descriptive qualitative research methodology used in this study provide insight into the methods and analysis. The purpose of this study was to explore how high achieving Gen Z teachers use technology to shape their professional practice and knowledge of educational policy. This research further explored how Gen Z teachers prefer administrators to use technology when they lead. This chapter covers the research questions, researcher positionality, epistemology, rationale for research design, an explanation of descriptive qualitative research methods include a discussion of participants, the pilot study, details of data collection, data analysis, and ensures the researcher commitment to ethical research.

Research Questions

In line with a basic qualitative research design, the research questions for this study used descriptive research questions to “seek answers about features, types or patterns within a phenomenon” (Elliott & Timulak, 2021, p. 29).

Research questions for this study include:

RQ1: How do high achieving Generation Z teachers use technology to shape their professional practice?

RQ2: How do high achieving Generation Z teachers prefer administrators to use technology when they lead?

RQ3: How do high achieving Generation Z teachers use technology to shape their knowledge of education policy?

Researcher Positionality

For 30 years, I have taught in Kansas public schools from rural to urban, lower socioeconomic suburban to higher socioeconomic suburban schools as well as a short stint as a non-profit program director. This perspective gives me longevity and experience with multiple movements, initiatives, and influences in education. Throughout the years, I benefited from gifted and generous mentors whose effort I strive to pay forward with mentoring of new teachers entering the profession. Ten years ago, I changed schools just as Gen Z teachers started to join our faculty. I immediately noticed a change in their approach to their classroom. My curiosity led me to develop close personal and professional relationships with a few of them. Their dedication to the profession is no less than mine with student-centered classrooms and a desire for excellence. Yet, Gen Z teachers view the workload of education, demands of education policy, and professional expectations very differently than I do. To an extent, I married my classroom and consistently spend 50-60 hours a week trying to ensure my lessons were rigorous, assessed, and all professional responsibilities met. This dedication brought me many rewards both intrinsic and extrinsic. I saw students flourish in my classroom and some under my tutelage unexpectedly went onto college and professional success. Awards came my way as well with district leadership opportunities, teaching awards in and outside my school district. Included among these awards were a James Madison Memorial Fellowship in 2005, named to the 2020 Kansas Teacher of the Year Team as the Region 4 Finalist, and most as a part of the 2025 Women Who Lead — Technology, Innovation & Education from the Wichita Business Journal.

My approach to teaching mirrors what I saw my parents do as educators and my mother saw her grandmother model as a teacher in the 1950s. Yet, the rewards system and expectations

in public education today are out of touch with the expectations and life choices of Gen Z. The result of this dissonance reflects in teacher retention numbers.

My assumptions as a researcher start with the belief that teachers teach because they love their students and passionately pursue their content (especially high school teachers), and this mix makes great teachers. My willingness to sacrifice my personal time is a hallmark of teachers of my generation and before but not of those in generations who followed. I assume that our elected officials at the local and state level who make education decisions possess the same respect and desire to educate my students as I do but this has proven less and less true the last couple of decades. Some politicians demonstrate clear hostility to the concept of public education. My biases run deep, and I face them daily. I firmly believe public education is necessary and worth the investment of time, talent, and treasure of communities and states. Education is worth the sacrifice of a person and family to obtain. This comes from my middle class, suburban upbringing with parents who both have a master's degree and grandparents who instilled an expectation of higher education in all their children. The rising cost of a college education and the debt required by many to attain it is a significant factor in the decision to obtain a college degree, go to technical school, or enter the workforce. I see the strain of these decisions on the faces of the high school students I teach every day as they struggle with college and career decisions based on cost rather than preference of institution. My parents paid for my bachelor's degree; my Madison Fellowship paid for my master's degree; I saved and took out loans for this degree.

Finally, I take my work as a social studies teacher and of shaping the voters of tomorrow very seriously which means following local, state, national, and international politics closely. The basis of my teaching philosophy lies in the belief that our democratic system of voting,

electing people to represent us, the rule of law, limited government, and I expect the integrity of that system to be upheld by those sworn to do so. These factors shape the person I am, the teacher I am, and the researcher doing this study. As an active Kansas public high school teacher two generations prior to Gen Z, I bring both an insider AND outsider perspective to this research study. My experience with the education policy and public schools from all three levels of government for the past three decades gives me an insider perspective. As I am a member of Gen X, I remain an outsider looking in when discussing the perspectives, values, assumptions, and biases of Gen Z as they start their teaching careers and I near retirement.

As the researcher, I carry both an insider and outsider role in this research. I am an insider insofar as I am an active public-school teacher who won a statewide teaching award in 2020. However, I am an outsider in terms of generations as a member of Gen X, with a birth year of 1970, defined as one born between 1965 and 1980 (Seemiller & Grace, 2019a). Currently, I hold membership in 17 social media apps – three Instagrams (personal, club at school, professional), three Facebooks (personal, club at school, professional), two X accounts (formerly Twitter) (personal and professional), two Snapchats (family and club at school), TikTok (club at school), GroupMe (friends and club at school), Remind (students), two Threads (personal and professional), WhatsApp (friends and former foreign exchange students outside America), and LinkedIn (professional).

Epistemology/Qualitative Lens

This research used an epistemological approach of social constructionism. Social constructionism is “a sociological theory that posits knowledge and reality are created through social interactions rather than existing in independently of individuals” (Kretchmar, 2019, para. 1). This approach works to help illustrate the use of social media and the internet as a source of

JIT learning for Gen Z teachers in that, “Implicit in the notion of continual change is the idea that multiple meanings can coexist at one time; there is no single truth, but rather a variety of perspectives available to use at any one time” (Kretchmar, 2019, para. 11). The internet and social media offer numerous meanings of resources, concepts, and ideas. Crotty (1998) writes that institutions established before us influence us, they are intrinsic to our existence and understanding, stating that “Without culture we could not function. Culture has to do with functioning. As a direct consequence of the way in which we humans have evolved, we depend on culture to direct our behaviour and organize our experience” (Crotty, 1998, p. 53). As people interact with their world, they make meaning based on the perspective they have been taught and their experience with objects or situations, from that we build understanding.

To clarify from constructionism, Crotty (1998) writes “The ‘social’ in social constructionism is about the mode of meaning generation and not about the kind of object that has meaning” (p. 55). In reference to objects, it may be a person or geographic feature which needs interpretation, and it is “our culture (shorthand in most cases today for a very complex mix of many cultures and sub-cultures) that teaches us how to see them—and in some cases *whether* (emphasis in original) we see them” (Crotty, 1998, p. 55). Culture and society influence our interactions with our community, our nature world, and with situations that arise in life. “Our knowledge of the natural world is as socially constructed as our knowledge of the social world” (Crotty, 1998, p. 56). The analogy offered to enhance understanding by Crotty (1998) refers to trees, not just the biological entity in nature but the meaning our culture gives to the name of the structure and its meaning in regards to our experience in life. Children learn the names to communicate. Children learn to relate to trees as a

source of livelihood if the setting for our childhood is a logging town. They constitute a focal point of lively aesthetic pleasure if we grow up within an artists' colony...They may have very little meaning at all if we come from a slum neighborhood in which there are no trees. (Crotty, 1998, p. 57)

The making of meaning from experience and objects through culture informs this research study. The meaning of a product of online technology is there before the it arrives; it will be interpreted by a Gen Z teacher through the lens of their experience priorly influenced by their culture. Using descriptive qualitative research methods, the researcher looked through their own lens to socially construct meaning from the observed use of technology by these teachers to shape their professional practice, their preferences of how their administrators use technology when they lead, and their knowledge of education policy.

Rationale for Research Design

Qualitative research is “based on the belief that knowledge is constructed by people in an ongoing fashion as they engage in and make meaning of an activity, experience, or phenomenon” (Merriam & Tisdell, 2016, p. 23). The importance of studying the influence of online technology such as social media, TFWs, and AI underlies the need for a qualitative approach as “understanding human experience relates to how people construct meaning interrelated to themselves, other, social situations, and world occurrences” (Kostere & Kostere, 2022, p. 3). Qualitative research allowed the researcher to ask open ended questions and construct meaning from the engagement (Creswell & Creswell, 2018). Other assumptions by Crotty (1998) and mentioned by Creswell and Creswell (2018) include humans are born into the world and a culture which then imparts meaning based on historical and social perspectives which arises out of interaction with human community, in this study it was the online community.

A qualitative study provided opportunities for participants to offer comments on a vast array of topics, answers, and insights of their own. Privitera and Ahlgrim-Dezell (2019) provide a simple definition of qualitative research design “as a method used to collect nonnumeric, narrative data from which conclusions are drawn without the use of statistical analysis” (p. 274). Qualitative research “is based on the belief that knowledge is constructed by people in an ongoing fashion as they engage in and make meaning of an activity, experience, or phenomenon” (Merriam & Tisdell, 2018, p. 23). In qualitative research, open-ended questions allowed for participants to offer the research more than expected in terms of their personal values and experiences and allows for the participant and researcher to construct meaning from their interaction (Creswell & Creswell, 2018). The experience of the researcher provided a passion for the research as well as perspective for construction of the study and analysis of the contributions of participants. This interest extends to “(1) how people interpret their experiences, (2) how they construct their worlds, and (3) what meaning they attribute to their experiences. The overall purpose is to understand how people make sense of their lives and their experiences” (Merriam & Tisdell, 2016, p. 24). In a summary of a basic qualitative research study, Merriam and Tisdell (2016) wrote that the study “focuses on meaning, understanding, process, purposeful sample, data collection via interviews, observations, documents, data analysis is inductive and comparative, findings are richly descriptive and presented in themes/categories” (p. 42). An understanding of the influence of technology on Gen Z teachers needed the broad, purposeful approach provided by a basic qualitative research approach.

Descriptive Qualitative Research

A generic qualitative research methodology with a descriptive approach grounded this research study. Researchers conduct basic qualitative studies in “a natural setting in order to

understand the participants in the context of their real-life experiences” (p. 4) using first person, open ended, conversational interviews (Kostere & Kostere, 2022). The primary goal of this research was to uncover and interpret the meaning of those interviews. The descriptive qualitative research process worked within the experience of Gen Z teachers. (Bhattacharya, 2017; Elliott & Timulak, 2021). The value of a qualitative study lies in the flexibility of methods for the researcher.

The methodology of descriptive qualitative research, as described by Elliott and Timulak (2021), guided this study. A deep review of the literature surrounding the topic of study, research problem, conceptual framework, and research design proved critical for this descriptive qualitative study. This was necessary due to the in-depth involvement of the research in the process and analysis of the data.

There is also a need for a thoughtful, complex, deep design in the research methodology which aligned with the values of the researcher in order to come to significant understandings of the study (Elliott & Timulak, 2021). The design of the study should enable other researchers to replicate the design if not the results due to the variability of researcher interpretation of data (Elliott & Timulak, 2021). The design of this study, using the conceptual framework of Just-In-Time learning provided a basis for replication and further study.

Interviews consisted of a guided conversation using carefully crafted research questions and interview questions using semi-structured interviews (Elliott & Timulak, 2021). The researcher interacted, not just with the participants of the study, but also with the data. The researcher directly transcribed the data and then sorted the data as the interview happened and during transcription. Then, coding methods created categories of similar entities of data to ultimately reveal themes.

Rather than an attempt to bracket and put aside the assumptions and biases of the researcher, Elliott & Timulak (2021) suggest researchers specify their researcher preunderstandings which “shape not only what we see in the data but also what we set out to study about the phenomenon, how we collect data, and how we structure those data (e.g., pragmatically, temporarily, theoretically)” (p. 20). The expression of these preunderstandings consists of researcher background, personal and theoretical expectations of the researcher prior to research, and a fully situated theoretical framework (Elliott & Timulak, 2021). The transparency of the researcher, expectations, biases, assumptions, and experience enhanced but also influenced this study.

Participants

Participants for this study were selected using the critical case sampling method. This method worked because

If a particular group has problems, it can be assumed that every other group has similar problems. Critical case sampling is preferred in cases where the study is restrained due to limited resources. In such situations, it is a strategic move to opt for the site that would yield the best information and have an impact on the findings. Studying a few critical cases does not help in generalizing the findings, but logical generalizations can be made from the evidence provided by such in depth study. (Shaheen et al., 2019, p.33)

The researcher’s access to the names and contact information of potential participants made this sampling method possible. The critical case sampling method used with Kansas Horizon Award winning Gen Z teachers as exemplars of their cohort gave the researcher the best opportunity to explore the experience of those recognized for their excellence and offer information-rich cases (Merriam & Tisdell, 2016). A critical case sampling method pertained to the small population

pool of high achieving Gen Z teachers so that lessons learned may provide insight into all Gen Z teachers.

The goal of saturation influenced the number of participants as defined by Creswell and Creswell (2018) as when “fresh data no longer sparks new insights or reveals new properties” (p. 186). Merriam and Tisdell (2016) suggest a sample number which produces a point of saturation or redundancy” which “means that you begin to hear the same responses to your interview questions...no new insights are forthcoming. It is impossible to know ahead of time when saturation might occur...must engage in analysis along with data collection. (Merriam & Tisdell, 2016, p. 101). Kostere and Kostere (2022) support purposive sampling to recruit participants who have the experience under inquiry and are willing to describe their experience” (p. 27). However, Kostere and Kostere (2022) caution against

a false sense of data saturation because it is easier to find patterns and themes that are pre-understandings or characteristics that are already known about the topic. Thus, possibility of missing new discoveries because of a premature belief that no new ideas will arise from the data analysis. (p. 26-27)

Kostere and Kostere (2022) recommend a sample size for a basic qualitative research study as eight to 15 participants. Creswell and Creswell (2018) suggest recruiting six to eight participants, if using interviews. Finally, Elliott and Timulak (2021) accept the concept of saturation and suggest 10 to 12 participants with interviews conducted in a descriptive qualitative research study.

Based on the analysis of the literature and author recommendations, this research study was conducted with 11 interviews of high achieving Gen Z teachers. Sixty-five participants, teachers from PK-12 Grades, were solicited from a pool of Kansas Horizon Award winning

teachers who are still teaching in the classroom and fit into the Gen Z cohort. Thirteen initially expressed interest, but 11 committed to the study.

Administrators, school principals or superintendents, nominate Kansas Horizon Award winning teachers due to their performance as exemplary teachers in their first year of teaching, one elementary and one secondary, from each school district is eligible (KSDE, 2024f). From there, the nominated teachers must submit an application in the fall of their second year of teaching (KSDE, 2024f). KSDE conducts the application process once nominations are received from school districts (KSDE, 2024f). According to the KSDE website, eligibility criteria are as follow:

- Nominee will have successfully completed his or her first year of teaching in a pre-kindergarten through grade 12 Kansas school accredited by the Kansas State Board of Education.
- Nominee will be a full-time classroom teacher.
- Nominee will be responsible for the assessment of students, assignment of grades, preparation of lesson plans, parent-teacher conferences, discipline, attendance, and other daily educational tasks.
- Nominee will have performed in a way that distinguishes him or her from other novice teachers.
- Nominee will be selected by the school district superintendent and building principal. (KSDE, 2024f)

Teachers compete for a Kansas Horizon Award by regions in the State of Kansas as defined by the congressional districts (KSDE, 2024f). Committees of teachers, community members, prior award winners, and business leaders make up the selection committees in each

region (KSDE, 2024f). Each regional committee selects up to four elementary and four secondary teachers for the award (KSDE, 2024f). These teachers are honored at the Kansas Exemplary Educators Network (KEEN) conference in February of each year (KSDE, 2024f).

The rationale for using Kansas Horizon Award winning teachers in this study was twofold. One, this selective group of teachers shows great promise for the future of the profession in Kansas. Each one distinguished themselves to stand out to building and/or district leadership staff for nomination. As the bright future of Kansas education, it was appropriate to study these young, innovative teachers as an exemplary subset of their cohort. Assumptions involved in using this subset of teachers reveal an understanding of the level of professional knowledge, expertise, and devotion needed to be successful long term in education. Second, the breadth and depth of the participant pool was the second rationale for selection. Kansas Horizon Award winners teach in classrooms across the State of Kansas and in all grade levels. This wide range offered more participants than choosing a group of Gen Z teachers from a single school district or region of the state.

The description of the participants in this study resulted from the information collected on the information checklist. Six participants teach in suburban districts, with five teaching in rural districts, with no participants reporting to teach in an urban area. Two participants only teach high school students, three only teach middle school students, three reported teaching middle and high school students, and three reported teaching elementary school students. Gen Z teacher participants averaged 2.8 years of experience in their current positions, with a 3.36 average of total teaching experience. Three reported substituting or serving as a para-professional or assistant teacher prior to entering their own classroom. All participants in the study attained a bachelor's degree at a minimum, with two attaining a content related bachelor's

degree in addition to their teaching degree. Three participants earned a master's degree with three more currently working on one. High school teachers participating report an average of three preparations to teach, with the most at six and least at one. Elementary teachers reported teaching at least five preparations, some more throughout their day. In regards to leadership roles, participants reported coaching 10 sports or activities, one manages a facility, four sponsor clubs, four serve on their building leadership teams, and one on the district leadership team.

Pilot Study

The data collection procedures and interview questions were piloted on two Gen Z teachers. This pilot allowed the researcher to assess if the interview questions were worded properly for Gen Z as well as if they allowed for the collection of data to address the research questions. This pilot study allowed for the researcher to use the foundations of the conceptual framework and preunderstandings to “facilitate the emergence of different and detailed understandings” not previously conceived and “allow oneself as a researcher to be guided by the pilot participant(s)” as to the effectiveness of the interview schedule (Elliott & Timulak, 2021, p. 35). Elliott and Timulak continued their advice to conduct a pilot study, stating

It is useful for the researcher to pilot a new interview before beginning serious data collection, so they can get some sense about how participants are likely to understand and respond to the questions...know from participants whether study inquiry is overlooking something of importance or whether they have any suggestions as to what the study should focus its inquiry on. (p. 35)

The pilot participants were asked for their perspective on the study, if the best questions were asked or if vital questions or issues had been overlooked, and whether or not pilot participants had suggestions for improvements to the study which were made prior to the start of interviews.

In the spirit of discovery and curiosity, Elliott and Timulak (2021) suggest “it is important for the researcher to be alert to the information that participants feel they have to tell the researcher for the researcher to understand them better” and they caution “all too often, researchers do not attend carefully to the nuances and sources of their research questions” (p. 35). The pilot study helped to mitigate poorly written or ambiguous or irrelevant interview questions as well as shone light upon any gaps in the research design (Elliott & Timulak, 2021).

Pilot participants significantly improved upon the design of the interview protocol of this study. Two pilot participants volunteered two hours of their time for one-hour interviews one week apart. As the interviews progressed, it became obvious that some questions were repetitive and that the researcher had missed the depth of the use of technology by Gen Z teachers, including the explosion of AI platforms available for personal and educational use. In all, approximately three quarters of the final questions used were revised or new from the pilot study. Some examples of changes include breaking out the questions into five distinct parts, rather than rolling from one topic to the next with no transitions or breaks. In Research Question #1, rather than asking, “How would you describe your relationship with social media?” the question changed to “How do you define social media?” Rather than asking, “What do you gain from online or social media use?” the question changed to “What benefits or challenges do you perceive in your use of social media as a professional?” The question, “If you do not mind, can you show me an app and/or website that you find useful?” seemed a minor question, yet it morphed into an entirely new section of questions and a whole new subsection of technology explored. At the suggestion of pilot participants, a third subsection of technology concerning AI surfaced, not because they were necessarily using it, but they were curious if their peers were so a new section was added. The questions about quality and discerning the validity of websites and

AI produced products necessitated the creation of tables with sample outcomes for quick follow up questions and note taking.

The debriefing portion of the pilot interviews led to important clarity for me about Gen Z teachers and what they were thinking about in terms of their use of technology. This study is better, richer, and more focused for their participation. Quality questions added from pilot participant suggestions include several which produced important data and findings. Both pilot participants suggested, “Do you distinguish a difference between your work at school and scrolling through and exploring education related posts at home on your own time?” The question, “What expectations or policies does your school district have concerning using teacher focused websites for planning and instruction?” produced astonishing results as participants explained their use, especially the time elementary level teachers spend on TFWs. The question, “What are the differences between using a search engine such as Google or Safari and using AI?” produced thoughtful responses. A question added from pilot participants which made the most impact was, “When might you consider turning to AI in your work as a teacher rather than another source of information?” This question led participants to reveal AI use not previously considered and inspired this question, “How does time impact your decision to use technology as a teacher?” If I were to repeat the study, this might be the first question I ask due to its eventual significance. The question that launched the deep inquiry of Research Question #2 and focused it was “What role does technology play in the leadership of a school or school district?” Finally, Research Question #3 on knowledge of education policy raised the anxiety of both pilot participants. They suggested just a sentence explaining the purpose of the questions might help. Therefore, “The purpose of this portion of the interview is to gain insight into your understanding of education policy and its impact on you as a teacher and your school or district.”

This helped to transition to Research Question 3 in the second interview and put many participants at ease. Two questions in the education policy portion of the interviews were added by the pilot participants and one by the researcher. The two pilot participant questions added were “How do you perceive teacher unions to be influential in education policy?” and “How much did your pre-service or college preparation inform you about education policy?” The best question added by the researcher was “What is the biggest gap in education policy being ignored today?” It is evident from the revisions made after the pilot study that the Gen Z teachers who participated offered thoughtful comments and suggestions to ensure this study gained the data needed to offer significance to field when completed.

Protection of Human Subjects

To ensure adherence to all ethical guidelines before, during, and after my study, I submitted my proposed study to the Kansas State University Institutional Review Board for review and approval prior to beginning the study. Following approval, a solicitation email (Appendix A) was sent to all possible Kansas Horizon Award recipients who research indicated might fit into the Gen Z cohort. Once those who met the inclusion criteria volunteered, they were sent the informed consent form (Appendix B). With the signed informed consent form received, interviews were scheduled using Calendly. To ensure the privacy of my participants, all identifying information was changed as needed and pseudonyms used. Participants were informed that they may withdraw from the research study at any time and any data collected will be deleted from the research study. Data collected included identifying data to ensure participant eligibility, voice recordings of narrative interviews, social media posts, examples of teacher focused websites, and products produced from AI queries, and researcher notes. The data are stored on my personal computer in my home under password protection in files intended only for

the storage of this information and in a locked office. The video portion of data from video conferencing applications was deleted and only the audio track preserved. This data will be kept for three years after the completion of the study. After that time, the data will be deleted from all devices and electronic storage files.

Data Collection

Data were collected from semi-structured interviews, as well as images of social media posts, TFWs, and AI queries. Prior to the first interview, an information checklist was sent to participants to collect demographic data of the participants and check for the volume and activity level of their use of technology.

Interviews

Data for this study were collected through a series of semi-structured interviews with participants. “Meaning is not discovered but constructed...(as) subject and object emerge as partners in the generation of meaning” (Crotty, 1999, p. 9) which demonstrates the necessity of both the researcher and the participants in the exploration of the use of technology by Gen Z teachers. The researcher with an insider view of the situation possesses the opportunity to understand participant perspectives and experiences with compassion and empathy in regard to the use of technology described in interviews (deMarrais & Lapan, 2014). The process of interviews allowed for the researcher to learn not only about the perspective of the participants but also about their own experiences which then gave more depth to the analysis of the data (deMarrais & Lapan, 2014). Elliott and Timulak (2021) state that “Good qualitative interviewing is not an automatic, mechanical process but instead involves a literal and metaphoric dialogue with sources of our data” (p. 39). Collaboration between researcher, the participants, and the data proved crucial to this research study.

The heart of this research study was the semi-structured interviews conducted in a respectful, private place or online using a video conferencing application. The setting was determined in a consensual manner by both researcher and participant. Special care was taken by the researcher to address a potential obstacle of familiarity between participant and research due to the researcher's insider status in education.

The qualitative interviews themselves were conducted in a conversational manner using carefully constructed questions in an attempt to focus the participants' thinking (Bhattacharya, 2017). Elliott and Timulak (2021) observed that interviewing

involves a degree of analytical work on the part of the interviewer, in which the researcher listens mindfully to the informant, reflects back and checks their understandings with the person, questions unclarities, and, in particular, listens to determine what question the informant is actually answering. (p. 39)

Open-ended questions were used to encourage participants to offer rich, thick descriptions of their experiences with technology as teachers then follow up questions were directed toward their preferences of administrators to use technology when they lead, and the use of technology to shape their knowledge of education policy (Bhattacharya, 2017). As “interviews are co-constructed narratives” Bhattacharya (2017) cautions researchers to “be mindful of the role your subjectivities play as you design your interview questions and conduct your interviews” (p. 137). The researcher acknowledged their insider perspective and used tremendous care, thought, and intention throughout the entire process. Finally, Bhattacharya (2017) cautions the researcher to “Be present during the interview. Be comfortable with silence. Be mindful of non-verbal communication” (p. 137). Open-ended questions ensured participants received the time and opportunity to offer their own experience, not guided by the questions.

Interviews were 60 to 90 minutes in length and followed the interview protocol (Appendix C). There were two rounds of interviews with each participant. The first interview explored the use of technology to shape professional practice and centered around the use of social media, TFWs, and AI to shape professional practice and addressed the first research question. The second interview explored the preference of Gen Z teachers of how administrators lead and their knowledge of education policy.

Information Checklist

To facilitate the efficient collection of information from participants, an information checklist was used to gather demographic information to verify their status in the Gen Z cohort, information on what technology participants used, how participants used technology (activity and volume of use), and the perceived impact of technology on the participant's professional practice (Appendix D). The use of this checklist was not to survey to participants but was used to prepare for the interview process, ensure rich sources of information, and ensure consistency within the semi-structured interview process. This checklist was only intended to standardize the questions asked about technological tools and to make data easier to record. The data collected was used to inform more detailed follow-up questions in the semi-structured interviews. The checklist was sent to participants once they responded to the solicitation email, signed and returned the informed consent form. Then the first interview was scheduled.

Artifacts

Technology artifacts representative of those produced or consumed by participants were collected from each participant. The artifacts revealed the types of online communities that participants follow, contribute to, and network with as members. Artifacts also included posts that supported their schools, communities, and groups Gen Z teachers coach, sponsor, or teach.

In addition, Gen Z teachers sent electronic artifacts to the researcher via email as examples of social media posts, influencers, TFWs and AI produced materials. Participants were asked to share a variety of examples of their use of technology such as the following:

- Social media influencers they follow for their professional practice
- Social media influencers they follow for education policy purposes
- Social media influencers they follow for professional learning growth
- Examples of social media mentoring and/or networking
- Examples of information or resources gained from teacher focused websites
- Lesson plans obtained from or inspired by teacher focused websites
- Materials created from AI queries
- Examples of their interaction online in terms of education policy at the local, state or federal level
- Advocacy done through their own social media apps

These examples of the use of technology were collected via snapshot or digital file from participant's mobile phones, laptop, or desktop devices during and after interviews to give time for reflection of what to submit. All participants electronically sent artifacts, with minimum of five and a maximum of 51 sent by two participants. In total, participants submitted 151 artifacts. Only a few were used in the text due to the identifying nature of social media posts, flyers, websites specific to content or grade level, or other factors that may violate the anonymity of the participants.

Data Collection Steps

The following steps outline the actions of the researcher and design of this descriptive qualitative research study:

1. Submitted Kansas State University IRB application for approval.
2. Once IRB approval received, piloted interview questions and data collection with two Gen Z teachers. Modified questions and procedures accordingly.
3. Solicited volunteer participants from the pool of Kansas Horizon Award winning teachers who fit requirements for Gen Z.
4. After teachers volunteered, sent the informed consent form for review and signature.
5. Once signed informed consent forms received, scheduled first interview and sent the information checklist to participants.
6. Conducted all first-round interviews using a video conference application and a remote recording device to record data.
7. Collected technology related artifacts relating to social media, teacher focused websites, and AI.
8. Transcribed digital recordings from first round interviews.
9. Completed preliminary review of data and composed additional questions for second interviews.
10. Scheduled and conducted second round interviews.
11. Conducted all second-round interviews using video conference application and a remote recording device to record data.
12. Transcribed digital recordings from second round interviews.
13. Provided interview transcriptions to participants for member checking and made corrections, as necessary.
14. Analyzed data.

Data Management

The interviews were recorded using a video conferencing application which allowed for automatic transcription. The researcher reviewed each transcript while listening to the interviews to correct any misinterpretations made by the software. The transcripts from both interviews per participant were subjected to the protocols from Elliott and Timulak (2021) and Saldaña (2021). Examples of technology artifacts from participants were collected in a jpeg, pdf, or mp4 file (for video) and stored in a folder on the researcher's password protected computer to ensure confidentiality. The above process was used to analyze data by categorizing them and interpreting their contribution to the professional practice of participants. The information checklist provided demographic data and information about technologies participants used, the volume and activity of the participants' used of technology and ensured participant membership in the Gen Z cohort.

As a medium of analysis, Quirkos was used which as an online qualitative research analysis website to analyze data. The researcher created an account to use Quirkos. Access to the online account required a password. In addition, each session of analysis, one for each research question, required a password to ensure security of data.

Data Analysis

In order for research to be meaningful, it must be organized so that others understand it. Data analysis organizes data to facilitate the communication of data to the field and beyond. This does not happen just once but in a continuous process from start to finish in an iterative manner which circles back, skips forward, repeats, and deepens the analysis (Bhattacharya, 2017). The researcher designs research questions and the interview questions with the intention of gaining access to the experiences of the participants and then goes into the data to find the answers

(Elliott & Timulak, 2021). When coding the data, “only the most salient portions of the corpus related to the research questions merit examination” (Saldaña, 2021, p. 27) yet with Quirkos, all the non-coded data remained if needing reconsideration. Three types of coding were employed to explore the narrative data offered by Gen Z teachers, with only two employed for the coding of the technological artifacts. The first coding cycle occurred by identifying codes and highlighting the words or phrases of the participants, giving each a different color and label using in Vivo coding (Saldaña, 2021). Elliott and Timulak (2021) suggest a hands-on approach to data analysis to stimulate more reflection on the data as the process occurs which is limited when using computer programs for analysis. For this reason, Quirkos was chosen which allowed the researcher to do all the work with no electronic analysis by the software. This approach preserved the voices of Gen Z teachers and allowed for a deep understanding of all aspects of the data and participant participation in the study. The second cycle used pattern coding with code landscaping to follow in the third cycle. The technological artifacts were only coded with in Vivo and pattern coding.

Additionally, descriptive qualitative research involves not only the explicit investigation of the data but also an implicit investigation using the researcher’s insider status to infer meaning in the data not in the transcript (Elliott & Timulak, 2021). The researcher carefully undertook analysis to ensure the voices of participants, not their own came through clearly. Elliott and Timulak (2021) suggested critical reflection which is “a reflective process that is cautious and questions our assumptions, the analytic methods used, and the emerging findings” (p. 42).

In Vivo Coding

The first coding cycle used was in Vivo coding to maintain the voices of participants. This study “prioritized and honored the voices” of Gen Z teachers as they described their use of

technology in various ways, both narrative and the sharing of artifacts (Saldaña, 2021, p.138). Saldaña (2021) suggests the researcher “feature participant voices, attune yourself to words and phrases that seem to call for bolding, underlining, italicizing, highlighting” (p. 139) as coding occurs. The process Saldaña (2021) suggests for first coding using in Vivo coding includes “to list them on a text editing page and then cut and paste them into outlined clusters that suggest categories of belonging and an order of some kind” (p. 140). The Quirkos website used for data analysis mimicked process as seen in Figure 3.1 by creating Quirks (represented as circles of different colors and sizes). The words of participants were highlighted and then coded into various color-coded options and labeled. Using in Vivo coding in the first cycle, the researcher coded to “condense the number of in Vivo Codes and provide reanalysis of initial work” (p. 140). Using in Vivo coding for the first cycle of coding preserved the voices of participants while also simultaneously moving the coded data into categories. The Quirkos website allowed the researcher to code and then re-code if necessary. At this primary stage, some data received more than one code until a clearer picture emerged from later coding. All data ended up with one dominant code in the end. The Quirkos website itself did not do the work for the researcher beyond holding the work for analysis and display.

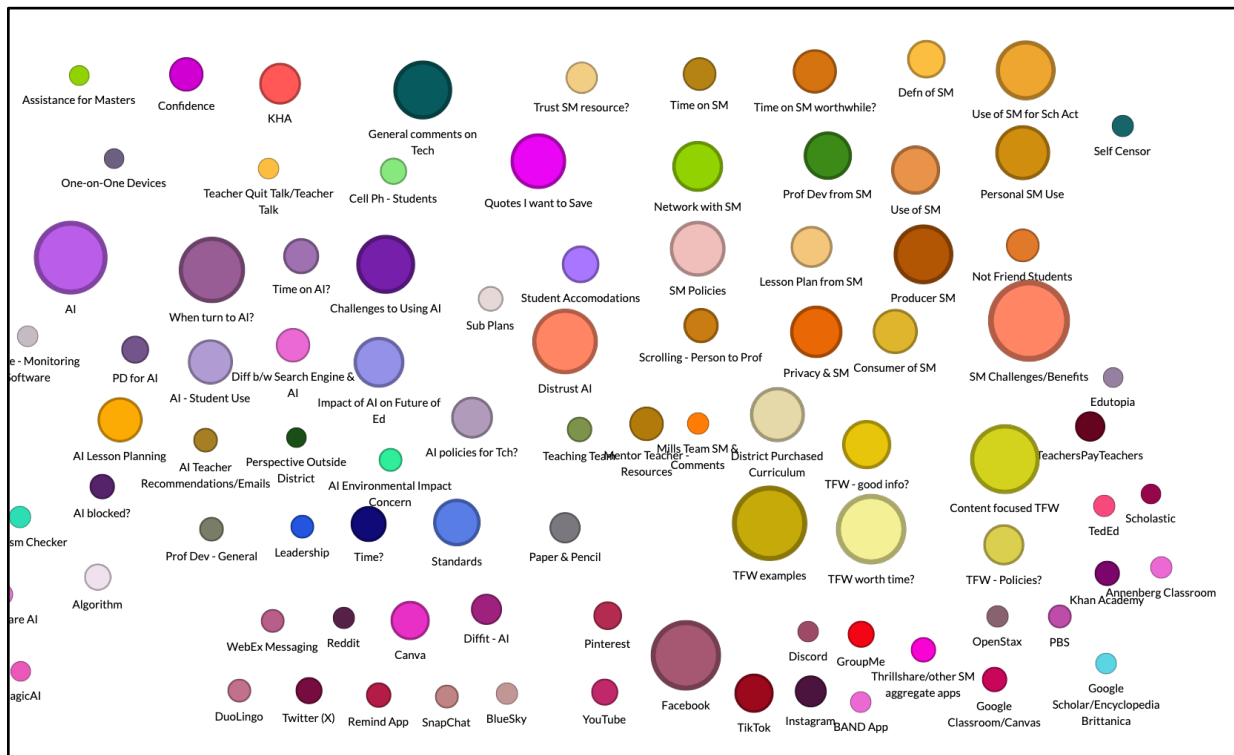
Figure 3.1 Quirkos Screenshot of in Vivo coding – First Cycle



Pattern Coding

The second round of coding used the pattern coding method. Saldaña (2021) suggests pattern coding in the second round as “a way of grouping those summaries into a smaller number of condensed categories, themes, or concepts” (p. 322). Pattern coding was used to “pull together a lot of material from first cycle coding [in Vivo coding] into more meaningful and parsimonious units of analysis” (Saldaña, 2021, p.322). As seen in Figure 3.2, the first in Vivo codes were collected into categories. The size of the circles indicates the number of codes in each Quirk or category with the larger the circle, the more codes it contains which demonstrates instructions to “review the first codes to assess their commonality and assign them various pattern codes” (p. 325). The Quirkos website allowed for the rearranging of the Quirks or categories on the screen geographically, if necessary, and then the combining of the Quirks into themes. Saldaña (2021) discusses the useful nature of pattern coding to construct categories from the first cycle codes. The research took the advice of Saldaña (2021) “to collect similarly coded passages from the data corpus” to construct the categories of data from “local meanings and explanations, commonsense explanations and more conceptual ones” (p. 324). Saldaña (2021) suggests that “pattern codes are hunches, some pan out, others do not” (p.325). The researcher found this to be true as some data thought at first to be significant later found itself overshadowed by further analysis.

Figure 3.2 Quirkos Screenshot of Pattern Coding - Second Cycle



¶ Code Landscaping

Code landscaping meets one of the strengths of the researcher to see big pictures as well preserve the constituent parts. Saldaña (2021) refers to this as a process that “integrates textual and visual methods to see both the forest and the trees. It is based on the visual technique of ‘tags’ in which the most frequent word or phrase from a text appears larger than the others” (p. 285). Thematic analysis provided the path to the final themes through a systematic, comprehensive process. Thematic analysis is “not bound to any specific theoretical framework, making it a versatile tool suitable for both inductive and deductive approaches to data analysis” (Ahmed et al., 2025, p. 1) which worked well with the JIT conceptual framework. Thematic analysis provides six steps which start with the interviews themselves and the subsequent

transcripts. Braun and Clarke (2006) clarified the steps of thematic analysis as illustrated in Table 3.1. This framework was used to guide the coding and analysis of this study.

Table 3.1 Six Step Framework for Thematic Analysis of Qualitative Research Data

Steps of Thematic Analysis	Researcher Process
Familiarizing yourself with the data	Interview transcripts reviewed by the researcher and sent to participants for member checks, interview notes reviewed.
Generating initial codes	In Vivo coding used in the first coding cycle using the Quirkos program, Quirks color coded and labeled.
Searching for themes	Pattern coding used for the second coding cycle to sort the Quirks into color families and geographically in categories.
Reviewing potential themes	Code Landscaping illustrated the different themes, with constituent codes preserved within. Multiple reviews of the themes occurred with merging and splitting of categories to ensure accurate representation.
Defining and naming themes	Themes refining multiple times, worked to accurately name themes to ensure relevance to research questions. Supportive quotes are used in Chapter 4 to discuss the themes.
Writing up	A thorough description of the themes with participant quotes, literature references, and analytic commentary occur in Chapter 5 to ensure methodological transparency.

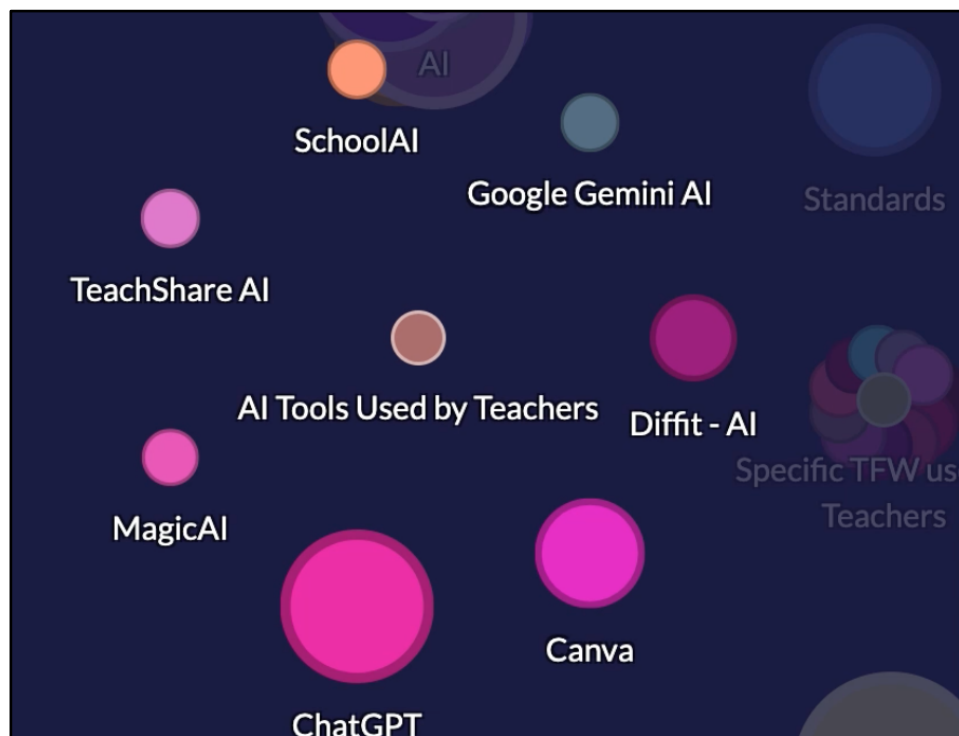
(Ahmed, et al., 2025; Braun & Clarke, 2006)

These steps reveal a general order to the process, but it is iterative and may need to circle back to refine the analysis. Within this study, all six steps were followed. The research took notes during the interviews and scrupulously read through the transcribed interviews for accuracy, clarity, and the voice of the participants. Initial codes developed through in Vivo coding using the words of the participants through 22 interviews, two interviews per participant. Next, pattern coding

provided insight into groupings of codes on the Quirkos screen using various shades of similar colors and geographically locating Quirks into groups. Multiple reviews of themes occurred as the research strove to find “coherence and distinction between the themes” (Ahmed et al., 2025). Themes were ultimately defined and named to best reflect the data which connects with the three research questions which was visually reflected with code landscaping. Finally, the themes were represented and described in the Findings in Chapter Four (Ahmed et al., 2025; Braun & Clarke, 2006).

The Quirkos website simulated this process as the Quirks grew larger as more codes of similar types made the circle larger. When Quirks were combined together to create themes, they still spread out and expanded when the researcher hovered over the root Quirk labeled as a theme, when not needed, the theme condensed as seen in Figure 3.3 on the right of “Specific

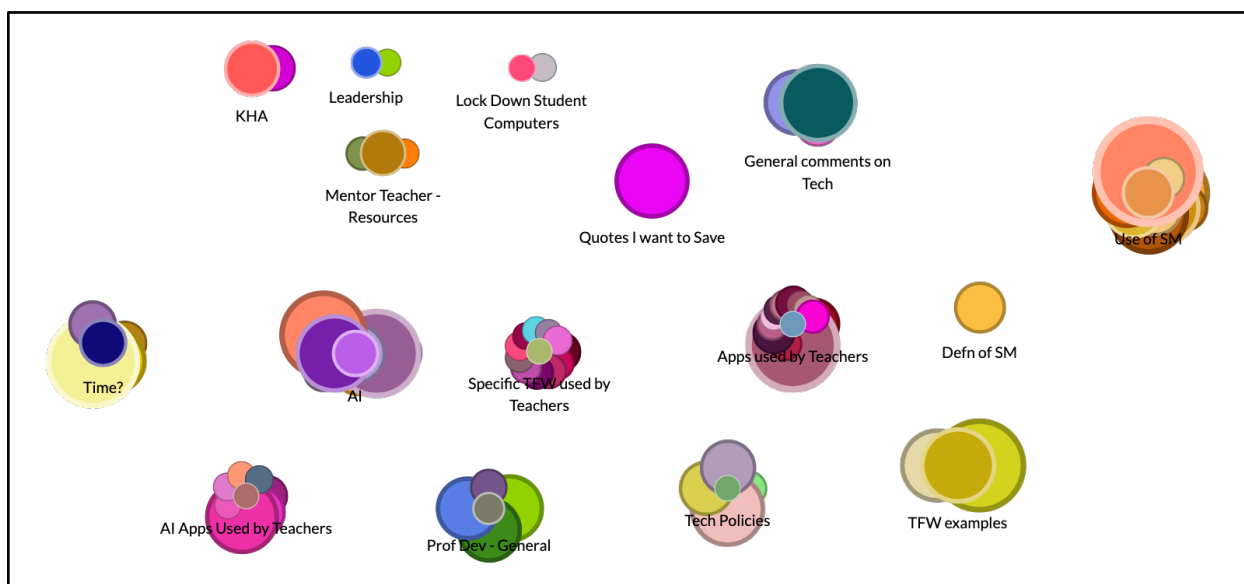
Figure 3.3 Quirkos Screenshot of Expanded Theme Hovering Over the Anchor Quirk



TFWs used by Teachers” and then the theme “AI Tools Used by Teachers” illustrated a theme expanded with its constituent categories visible.

The size of the circles indicates how many codes were included in the category represented by the circle, the bigger the circle, the more codes included. Finally, in Figure 3.4 the themes emerged from combining the Quirks, yet still maintaining the distinct code Quirks as

Figure 3.4 Quirkos Screenshot of Landscape Coding - Third Cycle



demonstrated in Figure 3.3. Themes in Figure 3.4 eventually represented most of the themes discussed in this study. Quirkos allowed the researcher to work online, code, recode, revise, and sort codes into Quirks or categories, revise, then sort into themes, revise, go back and analyze as necessary while keeping the full transcripts at the ready if something needed to be checked or reconsidered.

Due to the researcher’s status as a veteran teacher and member of Gen X, care was taken to note any cognitive dissonance experienced if values held by the researcher conflicted with those of the Gen Z participants. Saldaña (2021) cautions researchers to be aware of “dissonance

when his or her own values system is challenged by what he or she observes in the field or hears from a participant that counters firmly fixed beliefs” (p. 172-173). Thirty years of teaching and life experience ingrains values which need to be acknowledged and checked during coding and analysis of data.

Trustworthiness

Tracy and Hinrichs (2017) clarify the need for best practices and standards for qualitative researchers. These standards allow for researchers of all perspectives to read, critique, and benefit from the qualitative research of their colleagues just as the quantitative community experiences. Tracy and Hinrich’s (2017) Big Tent “serves as a benchmark for demonstration of credibility, rigor, and other criteria” (p. 2). The aspects of trustworthiness in a qualitative study follow.

Worthy Topic

The study of how high achieving Gen Z teachers use technology to shape their professional practice, how Gen Z teachers prefer their administrators to use technology when they lead, and the use of technology to shape their knowledge of education policy is a worthy topic of research due to the proliferation of information online and the depth and rate at which Gen Z teachers seek content knowledge online, network with like-minded colleagues, prefer administrators to lead, and seek knowledge of education policy which impacts them. When studying Gen Z, the parallel study of technology use is imperative due to their existence in both the online and physical worlds (Seemiller & Grace, 2019; Twenge, 2023).

Sincerity

Transparency and equity are highly valued in my classroom and were also demonstrated in this research study. My subjectivity statement and research processes were revised as needed

and all notes, data, analysis, mistakes made, and other issues were willingly disclosed as a part of the learning of the researcher.

Credibility

The pilot study for this research study was a sample to allow for the researcher to learn more about her methodology, conceptual framework, and more. I am committed to using what I learned to ensure and meet the standards of credibility set out by Tracy and Hinrichs (2017) of “Thick descriptions...crystallization and triangulation...multivocality...member reflections” (p.6). I offered complex data for readers to consider which was obtained from multiple sources, and with in-depth reflections about the data collected, themes that emerge from qualitative interviews, an information checklist about technology use, and sample artifacts from participants sent post-interview.

Resonance

Resonance is the transferability of the findings. Gen Z teachers can see themselves as they use technology. Public education leaders may visualize how they can lead Gen Z teachers better.

Significant Contribution

The influence of technology on Gen Z teachers is not to be dismissed lightly as they live online and in the real world with equal ease (Seemiller & Grace, 2019; Twenge, 2023).

Professional learning happens inherently as Gen Z teachers search online, post, and consume content at increasing rates. If stakeholders seek to understand this online environment and its effects, it must be studied. Research is emerging about the use of social media for professional learning, planning, and networking of teachers of all ages. Little research exists concerning how technology shapes Gen Z teacher’s professional practice, how they prefer administrators to use

technology when they lead, or how technology shapes Gen Z teacher's knowledge of education policy. Important discussions and decisions of education policy surround teachers every day as they try to educate their students, keep them safe (physically, emotionally, etc.), meet the demands of communities and local school boards, the state legislature, and in Kansas, the Kansas State Board of Education. This research shares some of that story.

Ethics

Critical for the credibility and effectiveness of any research study, ethics is essential. I committed to upholding the highest standards of ethics as I moved forward with my study. This is, has been, and always will be a standard practice in my classroom and a point of pride in my career.

Procedural Ethics

The ethics of procedures within this research study were met by receiving permission from the Kansas State University Institutional Review Board for approval of the research study methods prior to starting any research.

Situational and Culturally Specific Ethics

My ethical efficacy is entrenched in my work as a teacher. Throughout the literature review of this study, I found multiple blind spots due to my age and longevity as a teacher and member of Gen X. Special consideration was given to the worldview of my participants and the value that worldview offers the future of public education.

Relational Ethics

The impact of this study on participants may be significant. The impact of Gen Z in public schools offers opportunities for reform for those willing to listen and learn from them. Consequences such as teacher shortages may occur if stakeholders attempt to force Gen Z

teachers into a system which celebrates and promotes extreme work habits and cultural environments which celebrate the overachiever only. Gen Z may be unwilling to continue working in this system for another generation.

Exiting Ethics

I am committed to giving participants the time to debrief our conversation and help them clarify any ideas or issues brought forth by our conversation. I am also committed to telling their story as they shared it with me to accurately portray the high achieving Gen Z teacher.

Meaningful Coherence

With a goal of meaningful coherence, the research questions, conceptual framework of Just-In-Time learning, and descriptive qualitative research methodology and analysis were all carefully aligned and thoughtfully executed as suggested necessary by Tracy and Hinrich's (2017). My literature review includes a deep dive into issues surrounding my research topic. These include generational cohort development, Gen Z, previous generations influence on Gen Z, social media, educator use of technology and social media, how Gen Z prefers administrators to use technology when they lead, education oversight, and education policy. This literature review and tying it into the various part of my dissertation ensures readers understand where I obtained my data, ideas, insights, and suggestions as well as gives them a chance to understand from their own perspective.

Summary

This research study used the conceptual framework of Just-In-Time learning to explore high achieving Gen Z teacher's use of technology to shape their professional practice and knowledge of education policy. This research further explored how Gen Z teachers prefer administrators to use technology when they lead. The use of descriptive qualitative research

methodology allowed for an in-depth study of 11 participants who volunteered out of 65 invited from a pool of Gen Z Kansas Horizon Award winning teachers (Elliott & Timulak, 2021). Methods of inquiry included open-ended interview questions; an information checklist to gather demographic data about the participants as well as their use of technology; artifacts collected included technology related posts, websites and resources, and AI generated materials. All data was treated with the utmost respect for the confidentiality of participants and collected in adherence to the ethical guidelines outlined for human research studies at Kansas State University. Data analysis occur following the guidelines of descriptive qualitative research methods which include pre-analysis, understanding and translating data, categorizing, and integrating the findings of all data sources (Elliott & Timulak, 2021). During analysis, coding methods of in Vivo coding in the first cycle, pattern coding in the second cycle, and then code landscaping for the third cycle were all used to ultimately form themes. Prior to the study, a pilot study revealed needed changes to interview questions to better fit the Gen Z participants and explore the use of technology by Gen Z teachers. Trustworthiness of the study stands due to the seven criteria, and ethical guidelines, upheld with rigorous effort (Tracy & Hinrich, 2017). The researcher paid special attention to the protection of participant confidentiality due to the small participant pool and sensitivity of interview and artifact topics.

Chapter 4 - Findings

This chapter presents the findings of this study exploring how high achieving Gen Z teachers use of technology to shape their professional practice and knowledge of education policy. This research further explored how Gen Z teachers prefer administrators to use technology when they lead. Data were collected from high achieving Gen Z teachers and analyzed using a thematic analysis approach.

Technology Used

Gen Z teachers shared a variety of technology that they used which may be categorized into the three categories of social media, TFWs, and AI. The most commonly used social media apps were Facebook and Instagram with GroupMe the most used social media messaging app. In the category TFWs, six of the eleven participants reported using TPT and Canva with five using PBS Learning Media. When asked about AI models used, seven participants used ChatGPT and two used Diffit. Elementary teachers reported using more district purchased digital curriculums, review game websites, and other content specific sites than middle and high school teachers. One participant reported no use of social media and three reported no use of AI. Table 4.1 shows the number of social media apps, TFWs, and AI models used and the number of participants who used each of those technologies.

Table 4.1 Table of Technology Reported Used by Gen Z Teacher Participants

Social Media Apps	Teacher Focused Websites	Artificial Intelligence (AI)
BAND(1)	Blooket - 3	ChatGPT - 7
Bluesky (1)	Canva (6)	Diffit - 2
Discord (1)	Kahoot - 2	Google Gemini - 1
Facebook (7)	Khan Academy (2)	MagicAI -1
GroupMe (5)	PBS Learning Media (5)	SchoolAI - 1
Instagram (4)	TeachersPayTeachers (6)	TeachShare - 1
Pinterest (4)	TED-Ed (3)	No use of AI - 3
Reddit (2)		
Remind (3)	Middle & High School	
Snapchat (2)	Content Specific Sites (20)	
TikTok (5)		
YouTube (7)	Elementary Content	
Zoom (11)	Specific Sites (27)	
No use of Social Media (1)		

Note. The number in parentheses indicates the number of participants who reported using each specific apps, websites or AI models. No measurement of volume was collected for the use of each app, website, or AI model.

Themes

High achieving Gen Z teachers offered insights into their use of technology to shape their professional practice and knowledge of education policy. The research further offered insights into how Gen Z teachers prefer administrators to use technology when they lead. To address the first research question, the use of technology to shape professional practice, themes addressed the various uses of social media, TFWs, and AI. The second research question revealed the ways Gen Z teachers preferred administrators to use technology when they lead. Finally, the third research question offered insights on how Gen Z teachers use technology to shape their knowledge of education policy. Each research question elaborated the varied ways

Gen Z teachers used technology as they taught, planned, learned and performed as professionals in their classrooms.

Influence of Time on the Classroom Use of Technology by Gen Z Teachers

Despite concerns, Gen Z teachers stated they used technology when they did not have enough time to complete tasks. Time emerged as an underlying factor for Gen Z teachers' use of AI tools in regards to accommodations for student needs, plans for substitutes, help finessing an email, or the need for a last-minute resource. Overall, Gen Z teachers discussed a complicated relationship with AI as they value their own skill and competence as educators yet seek to find the time to meet the needs and standards of a modern classroom.

When a student needed assistance on a specific skill, these teachers found that AI helped them create the teaching tools they needed quickly. Sage indicated use of AI to drill down to the very skill a student needs to practice, stating, “I know exactly where my students are, I know exactly what we're practicing, and just, like, little nuances that I can put on Canva when I'm making them a worksheet to [help].” Lincoln expressed that AI is

helpful on time if I forget something, or I'm short on time, or I need something quick, or emergency subplans. I can easily pull something within a couple of minutes of my morning, or of my plan time... but I also really try not to rely fully on it.

When addressing a standard, Phoenix found that AI helped to inspire ideas for projects. “Sometimes I'll put in the standard that I'm trying to teach...help me create a project for this standard, and it gives me ideas.” Offering students complex projects which often include art, Madison shared that they used AI because they “know a kid maybe can't draw, because... I'm somebody who can't draw at all, and so there is a value there. I think it can be useful sometimes

for visualizing those sorts of conceptual things.” Gen Z teachers used AI to fill gaps in lessons, plan for emergencies, brainstorm ideas for projects, and level the field for student skills.

Riley found one convenient use of AI tools in creating makeup tests for students who may be absent. August emphatically expressed, “The only reason I ever, ever generate anything with AI is if I run out of time. It’s a fail-safe, not a standard.” As an example, August gave the scenario of a student losing computer privileges due to behavior. They needed a supplement to run alongside the coursework of other students for a week. They stated, “I had to figure out what to do with him. So, in that case, I generated something. I’m not proud when I do it. I needed him to be busy.” August then expressed a sincere commitment to intentionally using AI to teach students how to use it responsibly, stating

This is me sitting you down and teaching you how to prompt an AI. It’s kind of synonymous; it’s just the next step. I have to teach you this; you have to be able to use it in a way that benefits you, instead of in a way that takes away from your life.

Taylor, along with several other participants, used AI to prepare substitute plans. They stated,

I’ll put the YouTube link video in there, and I’ll watch the YouTube video, and then I’ll have it make questions, and then I’ll check everything. When I’ve stayed at the school until 8.30...and I have to be gone at 7 the next morning, I will do stuff like that.

In an additional use, Sage and Phoenix discussed using AI to help them finesse emails about sensitive or difficult topics. Sage stated reluctantly, “I just can’t [use AI] unless I am absolutely speechless, and I feel like my words might not be the best in that scenario.” With more enthusiasm, Phoenix explained,

I’ll write emails to parents, and I will copy and paste in there, and I will say make this, more professional, check my spelling, clean this up, especially with sensitive topics like

student hygiene. The smell of kids, they stink. So, being able to email a parent and putting it in the right words, ChatGPT has helped me, so I don't be like, hey, your child stinks, you know, we need to do something about it. It's a nicer way”

Although Gen Z teachers reported minimal use of AI, when they did use it, it was targeted, strategic, and helped to save them time.

Gen Z teachers reported using several AI tools in their classrooms, most tools are specifically designed for teachers by AI companies. Only a few Gen Z teachers used the general AI tool ChatGPT for classroom use. Participants went to great lengths to describe their specific uses of specific AI. The use of AI tools by Gen Z teachers improved their instruction in the classroom by allowing the efficient creation of resources needed for specific students or tasks. No participants used the AI materials without review or revision due to concerns of incorrect information or not meeting their stated need for the use. Alex also described their use of one AI model in Figure 4.1 which is designed for teachers, stating

I really like using Diffit in a very controlled way. I like it because I will proof all of it...it does make great readings for the kids, and I can really home in on the specific reading level. I can put in the standards I want it to go towards, I can put in all sorts of information, and it will really tailor it to precisely what I want it to look at.

Figure 4.1 Example of an AI Generated Lesson from Diffit

 **Reading & Summary**



THREE LITTLE PIGS: Once upon a time, there were three little pigs who decided it was time to leave their mother's home and build houses of their own. The first little pig, e built his house out of straw. The second little pig, wanting something a bit stronger, used sticks to construct his house. And the third little pig, who wanted to build a strong and safe home, decided to use bricks.

One day, a big bad wolf came prowling through the forest, hungry for a tasty meal. He spotted the first little pig's straw house and approached it with a wicked grin.

"Little pig, little pig, let me in," the wolf called out, his voice dripping with menace.

"Not by the hair of my chinny-chin-chin!" the first little pig squealed, shaking with fear.

With a huff and a puff, the wolf blew down the straw house, and the first little pig barely escaped with his life. Trembling, he ran to his brother's house made of sticks for safety.

The wolf, undeterred, followed the first little pig to the second little pig's house. "Little pigs, little pigs, let me in," the wolf snarled, his eyes gleaming with hunger.

"Not by the hair of our chinny-chin-chins!" the two pigs cried out in unison.

With even stronger huffs and puffs, the wolf blew down the stick house, and the two little pigs fled to their brother's brick house, terrified of the wolf's ferocity.

Determined to feast on his prey, the wolf approached the sturdy brick house and demanded entry. "Little pigs, little pigs, let me in!" he bellowed, his voice echoing through the forest.

"Not by the hair of our chinny-chin-chins!" the three pigs shouted defiantly from inside the brick house.

Created with web.diffit.me

Taylor used Canva to make worksheets and other materials for their content and sponsored activities. They stated, “I will make worksheets on Canva. We do a lot of our activity promotional materials on Canva, so programs, flyers, posters...headers for Facebook posts.”

Lincoln used ChatGPT because it does “a good job of giving me engaging ways that I can introduce narrative writing to a group of students who are at varying levels. I can describe it to

ChatGPT, and it will give me a boatload of information.” Other AI tools Gen Z teachers reported using were TeachShareAI, SchoolAI, MagicAI, and Google Gemini.

Gen Z Teachers Valued Online Professional Learning and Networking

Gen Z teachers valued professional learning as a part of their social media consumption demonstrating use of JIT when learning. Seeking niche professional development, August sought professional learning online and found “an hour-long video recording of a professional development meeting and watched it for free.” Phoenix noted that social media “makes access a lot easier instead of having to go somewhere, find a sub and spend leave days, it’s just right there at the tip of my fingers, which is nice.” Both Taylor and Lincoln recognized the value of social media in that they can actually see another teacher do a lesson before trying it themselves.

Lincoln summed up both participants when they remarked,

I love it! It’s interactive and interesting. It is something I can do on my own, test it, and share it with others if it works. I can hit pause if I need to think about something.

I can see an idea and how others did it before I try it in my classroom. It is cool to see what other teachers are doing.

Phoenix stated that “anytime I have questions, I can go and put in a #hashtag, and I can look it up. It connects me with what I need.” Curiosity drove Gen Z teachers to search for methods, strategies, and like-minded colleagues to inspire them. To do this, Gen Z teachers scrolled through Facebook and Instagram or deliberately used hashtags to search for resources and ideas appreciating the speed and convenient access of information and resources they find.

Gen Z teachers consumed social media in a variety of ways to learn which impacted their professional practice. Overall, they consumed far more social media in their role as a teacher than they produced in regards to pedagogy and professional learning. Sometimes they

intentionally searched for specific topics or methods, other times they just scrolled across something outside of school. Phoenix stated, they “pin a lot of things. I’ll just go and look up ideas for class. I consume, but I don’t post anything on Pinterest. It’s used more on the side of pictures of projects.” Sage described themselves as “mostly a consumer. I’m still using the entity that others have made. I don’t put out too much stuff. I probably post less than 10 times a year.” August claimed they “skewed towards consuming.” Madison reflected that “since I became a teacher, I am more of a consumer”. Devin expressed that “even in a professional capacity, if I’m looking for tips or advice on a [professional Facebook page], I typically don’t post unless there’s something specific when I’ve encountered that situation and here’s what worked for me.” Regarding their use of TikTok, Lincoln emphasized that “It gives lots of ideas. I love to learn about all sorts of things,” and that it “connects my team of teachers and all of us use it with our admin in the building.” August scrolled Reddit on their plan or downtime if they are “looking for a specific thing, I’ve always been able to find really good quality stuff.” Social media played a significant part in the lives of Gen Z teachers as they plan and learn to improve as teachers.

Much of this consumption of social media occurred outside of school hours, where the personal and professional lives of Gen Z teachers sometimes mix. Andrew admitted they do not generally go looking for ideas but stated, “I suppose I do kind of clock in that instance. I type myself a quick message. I suppose that’s a bit of a brain shift.” Taylor and Wynn both used TikTok in professional and personal ways. Taylor sometimes “stops to see what other teachers are doing.” Wynn remarked they

will be frequently scrolling through TikTok, and they’ll see something another teacher has posted and think we need to do that or that’s a good idea. I’ll either bookmark it, send it to myself or save it. My brain will pin stuff like that, which could be valuable in the

future.

Phoenix also scrolled TikTok, and when they see “something that’s school related, I bookmark it. I have three different bookmark pages because I’ve run out of space in the first two.” Taylor commented that “if I’m just scrolling on Facebook and I see something interesting, maybe I take a screenshot of it to come back later. I do comment sometimes.” Sage is also on Facebook and stated, “I spend the majority of my time on Reels. I see lots of things on there and think, that’s a great idea! That’s probably the most beneficial side, getting ideas of what other people are doing on there.” Alex commented on their learning from social media consumption when they stated,

It’s more just who I am as a person. It’d be really tough to divide my thoughts into work thoughts and personal thoughts because I’m almost constantly thinking about work. I love to teach and am almost constantly consuming, whether it’s an audiobook, an actual book, or something on Instagram, etc. It does inform my teaching, but I don’t think I’d consider that work.

Lincoln stated they “saw no significant difference between the two (personal or professional). Scrolling through and I come across something cool for school, I pause TikTok and jot down ideas or go to Amazon to find supplies to do something.” When discussing whether or not a cognitive shift occurred from personal time to their teacher role when scrolling personal social media, Devin added that they “don’t know that they make a conscious choice to do that [shift from personal to school mindset] unless it’s something I want to type a note about how I want to use this in addition to the post.” Madison sometimes went to a specific professional Facebook member page to “see what they are posting, looking to see if there’s any good resources, not looking specifically for lesson plans, but maybe I’ve created a good resource that I

can share with the group, I'm happy to do that." Social media used outside of school contract hours contributed to the professional practice of Gen Z teachers in a variety of ways.

In regards to online networking, several Gen Z teachers gave examples of networking online. Chandler noted they keep in touch with many colleagues they met at a conference via email. Madison provided that they are a part of a Discord group formed at a conference, in which they sometimes engage in chats about strategies to address complex topics in class. August offered that they network with colleagues from other schools due to teaching an elective class. Devin used social media "as a way to stay connected to people in other states or other parts of Kansas that I met through professional development." Wynn added that it is "nice to be able to connect with other educators and professionals across the state and see what's going on, obviously it [social media] makes communication way easier." When discussing the benefits of social media, Madison urged that "it is extremely valuable to connect to people who live outside your sphere. It's always helpful to talk to people from as broad a spectrum as possible." Sage carefully took that broad spectrum into their classroom as well, in an attempt to not "make community members uncomfortable, or make students uncomfortable, just continuing to do things in a new and innovative way to that it's not the same all the time." Gen Z teachers used social media to build relationships, communicate with stakeholders, and increase their creativity and content knowledge.

Alex, Sage, and Madison all discussed the perspective social media gives both in school and in bringing the world into their classrooms. Sage reflected that they use social media as a measuring stick for perspective, describing a popular online administrator influencer saying, "Things like that just build my sense that it is possible to have an admin like that." Sage went on to describe the comparative aspect of social media, having only taught in one other district, they

suggested that social media “built a sense of gratitude, thank goodness that’s not happening in my district.” Many participants shared concerns about this comparative aspect of social media. Gen Z teachers spent time learning off contract hours to ensure the quality and effectiveness of their professional practice.

Gen Z Teachers Used Technology to Meet Learning Standards and Improve Depth of Instruction

Gen Z teachers explained their use of TFWs as necessary resources to enhance their lessons. KSDE provides standards as guidance for grade levels and content courses. Gen Z teachers sought out and used TFWs to fill in curriculum gaps to provide appropriate and engaging student experiences. These TFWs saved Gen Z teachers time, expanded the topics and perspectives offered, and allowed them to meet the needs of a spectrum of students in the classrooms.

When discussing the impact of TFWs on their teaching, Sage observed that “it’s helpful in that it’s obviously all standards linked. We’ve already vetted all of our curriculum to be linked with our standards.” They went on to describe

just different websites we’ve found that allow teachers to assign things based on grade level, all the way down to breaking down standards and skills. I know they need to practice this skill, because I know it’s linked to the standard and that’s where we’re at pacing-wise. But like, let’s say with my student who’s not on [on pace with the] curriculum because they’re not on grade level, then I’m looking at their IEP goals. I can use my teacher laptop to view my students’ progress.

Phoenix recognized time for their students on a district purchased supplemental websites added value for students by stating,

The time is worth it. It's good because I can go to the [sections designed for] Kansas Standards for Science, Kansas Standards for ELA, for Math, and I can use that to help the kids target what we're missing and to prepare for things and for them to use as an extra practice.

Wynn asserted the value of TFWs as they expressed the importance of supplemental websites that they can “just supplement into the lesson. So that's one of my biggest criteria, is it has to be adjustable to the level. I know where the kids are at based on our own district curriculum.” They found one website in particular they liked because it makes a game out of practicing, as it is “guessing software.” Wynn knew what level students are reading at and their mastery of other skills necessary for progress in their class. They offered, “Normally, I stick to the websites that allow me to change all that and use it as supplemental, instead of it being the direct source of the lesson.” Gen Z teachers used the connections to state standards in their online curriculums to ensure fidelity. Standards guided the lesson planning of Gen Z teachers with the use of district purchased curriculums and resources. If those curriculums did not meet the needs of their students, Gen Z teachers did not hesitate to go beyond. They sought out the resources they deemed necessary to ensure their students, not only met the standards set by the state, but met or exceed their district’s expectations. TFWs played a significant role in Gen Z teachers excelling in their professional practice.

Several Gen Z teachers noted they used TFWs as a resource for readings on some topics that piqued student interest but may not have been widely covered in the curriculum. These TFWs allowed them to align their class with the classes of other content areas. August pointed out this as an advantage “because it's always great when you can get that oh, what I talked about in my class also relates to your other class that you have later in the day effect.” Alex used a

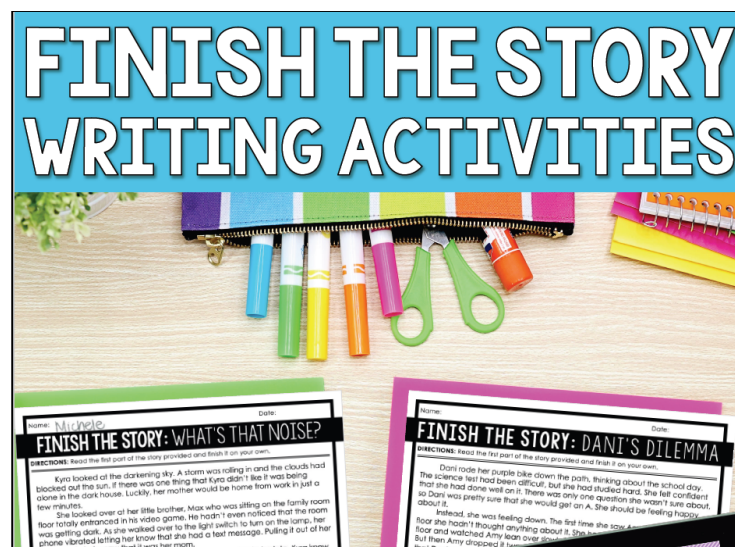
specific website because they loved the resources and videos which were short, on topic, and helped students to understand where they could apply those concepts in their daily lives.

Some Gen Z teachers used TFWs as a place to start their thinking when lesson planning. Madison described the use of a content focused TFWs which enhanced their lesson planning. They used TFWs as a

mental jog place. I will rarely just take their lesson plans verbatim, or even 50% of them, but it's a useful thing to see what might interest students. But I will rarely use their lesson plans as is. I'll see what it's doing, and I might take bits and pieces. Sometimes, they might have a document I might use and stuff like that. I don't think I've ever taken just a straight lesson plan from them.

Gen Z teachers used TFWs to expand their curriculum, found lesson plan ideas, and brought relatable events into the class discussion. Phoenix offered an example of a TPT lesson they purchased and used from TPT in Figure 4.2.

Figure 4.2 Example of a Lesson from TeachersPayTeachers as a TFW



Over the past few years, TPT emerged as one of the more popular for profit TFWs that provides lesson plans for teachers of all grade levels and contents. In regards to their use of TPT, Lincoln explained an efficient approach to its use.

We use one curriculum for math, and then another for reading and writing. If I'm looking for something that I'm not finding on those sites, I go to TPT and try to find things other people created based on those curriculums.

Other participants also used TPT to find alternative ways to approach a topic or make modifications for exceptional learners.

Gen Z teachers found TFWs invaluable as sources of inspiration and understanding around complex concepts. Riley identified a series of simulations which covered many complex topics in their curriculum.

I use them, not all the time, but often. And I really love them because they can take more abstract concepts, or even situations that we just couldn't *do* in the class and then they show you what they would be like on the screen.

In regards to scaffolded class resources, Chandler and Riley both mentioned the use of TFWs to meet the needs of English Language Learners in their classrooms. Chandler reflected, “I’ve got some ELL students, does this video have subtitles?” to provide better access. Riley used TED-Ed and Khan Academy because, “the articles are great. They’ve got a few videos that are helpful when we cover certain difficult concepts.” The use of Khan Academy videos offered a different angle of an explanation for students to understand a concept. This also gave students a resource they might refer back to as they reviewed for an exam or quiz. Figure 4.3 provides an example of the use of Khan Academy in a lesson plan. A Gen Z teacher narrated a common process in their classroom while using slides to incorporate a TFW in their teaching.

We start with the Khan Academy video, and then I come in to break down what they were doing. I have the students practice it. Then, we go over what they were practicing together. It's kind of like, I do, with the Khan Academy, I show them, and then, you do, and then we do together.

Figure 4.3 Example of a Khan Academy as a TFW

The image shows a screenshot of a Khan Academy video player. The video content is about compound-complex sentences. It includes handwritten notes on a chalkboard background:

- Compound-Complex Sentences
- complex = 1 independent + dependent(s)
- compound = independent + dependent(s)
- compound-complex = independent + dependent(s) + dependent(s)
- Example sentence: "After the storm passed, I went outside, and I picked flowers." with labels (DC + IC + IC)

The Khan Academy logo is visible at the bottom of the video frame.

Below the video frame, the page number 44 is displayed.

The next slide (page 45) contains the following text:

DIRECTIONS: Write a formula for each sentence, labeling each clause (IC, DC)

Example: After the storm passed, I went outside, and I picked flowers (DC + IC + IC)

Practice:

- 1.) After we won the state championship, the team captain jumped for joy, and the fans cheered.
- 2.) You can come pick up the cake, or if you would prefer, we can deliver it to you.
- 3.) Kaci has a bountiful vegetable garden, so she is always outside when it is sunny.

Your Turn:

- Write a compound-complex sentence.

A timer showing 05:00 is visible in the bottom right corner of the slide.

Below the slide, the page number 45 is displayed.

The next slide (page 46) contains the following text:

DIRECTIONS: Write a formula for each sentence, labeling each clause (IC, DC)

Example: After the storm passed, I went outside, and I picked flowers (DC + IC + IC)

Practice:

- 1.) After we won the state championship, the team captain jumped for joy, and the fans cheered. (DC + IC + IC)
- 2.) You can come pick up the cake, or if you would prefer, we can deliver it to you. (IC + DC + IC)
- 3.) Kaci has a bountiful vegetable garden, so she is always outside when it is sunny. (IC + IC + DC)

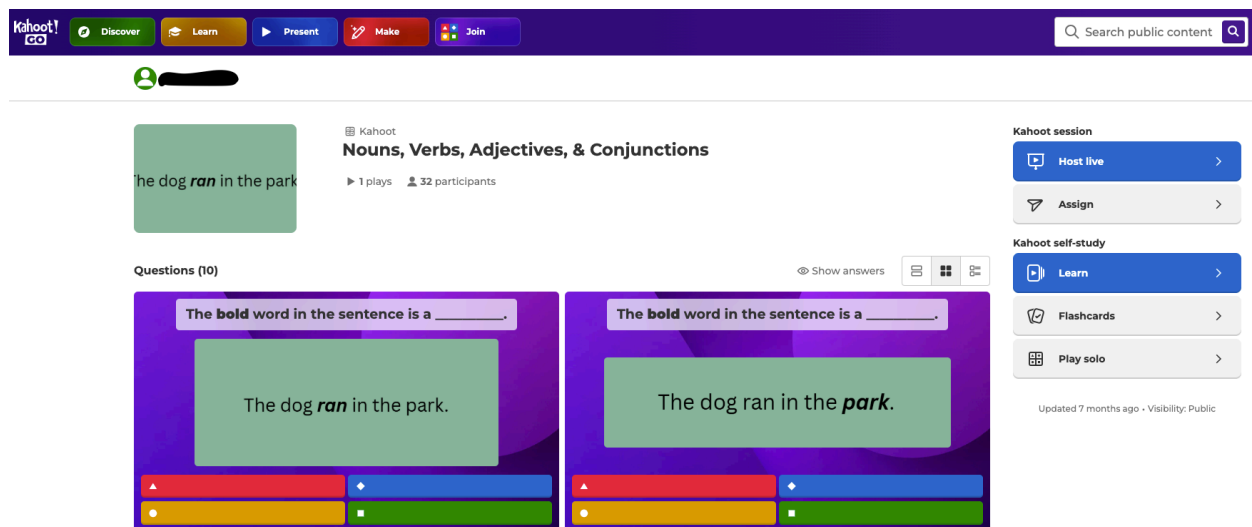
Your Turn:

- Write a compound-complex sentence.

Below the slide, the page number 46 is displayed.

Other types of TFWs, review game websites offered Gen Z teachers opportunities to use every minute of their class time. Sage, Lincoln, Phoenix, and Madison among others used sites such as Kahoot, Blooket, or Quizlet (Figure 4.4) to review for tests, add a bit of competition in before recess, or as a reward. TFWs offered teachers a variety of choices as they sought to meet the needs of all students in their classrooms.

Figure 4.4 Example of a Kahoot as a TFW



Gen Z teachers used TFWs to offer enrichment for students beyond the regular curriculum.

August related that they

start there first [district purchased curriculum], because it's the curriculum. And then I have to supplement it. It is not enough for my classes. So, then I go to trusted sources that I know professionals use in the field use. If students have a little bit of free time, they want to use that. There's a lot of really good interactive and informational videos.

Lincoln collected resources “catered towards different things that they're interested in” to ensure increased student engagement from additional practice to enrichment options. TFWs offered access to learning about complicated topics in different modalities such as simulations, videos

detailing processes not observable in classrooms, and better understanding for learners needing accommodations.

Gen Z teachers used a myriad of TFWs on a daily basis at all levels, PK-12. Access to and use of these websites and software programs costs districts money and teacher's time. Gen Z teachers noted the many ways they leverage these websites to their advantage in lesson planning using data provided by TFWs to challenge students' potential beyond the general curriculum. The general trend of technology will not likely decrease. This challenges Gen Z teachers to sort through all the options, decide what is best for their students, and how to budget their time while accomplishing other tasks required of teachers.

In an alternate use, Devin used TFWs to help organize the literature in their classes and to increase the selection of literature in their class to better serve and meet the needs of the diverse preferences of students. Devin reflected

I still spend quite a bit of time looking at selections. I'm on there probably every week looking at something, either because somebody will mention a person and I want to research or something by that person or one of their works. I want to look and see if it's applicable for my students.

TFWs offered teachers time savings as well as plethora of data for use when lesson planning to allow for scaffolding to meet the needs of every student in the classroom.

Gen Z Teachers Used Social Media to Communicate

Gen Z teachers used social media to connect and communicate with students, parents, and communities. Some Gen Z teachers used social media to connect with students to establish relationships and connect students to their classroom. Some used social media messaging apps as an integral part of their classrooms for logistics when traveling, organizing class projects,

communicating, and celebrating with students and families. Gen Z teachers also connected with online communities that helped to give perspective on their classroom and school.

In an example of communicating with students, Alex described their use of social media as a way to introduce themselves to students who may have them throughout their career in their building. They stated, “I’ll show them my teacher Instagram and they can get an inkling of my personality. Then, they may ask questions, I can ask about them. It’s definitely helped me to get along with and get to know my students.” For current students, Alex used Instagram and “posts updates for classes, maybe a meme or something funny that would remind them they have a test.” In an effort to give equal access to all students, Alex described their efforts to use social media to communicate with students and parents when they stated,

we’re a pretty low SES school, so there’s actually more than a few kids who have no internet access at home. Anything I send out, I always make sure to tell them (verbally), email them, post on Google Classroom, send a mass email to parents, and send out a paper too, because it’s not the kids’ fault that they don’t have internet at home.

To do all this, Alex reported spending approximately an hour a week on their teacher Instagram. Gen Z teachers used social media to meet their students online in order to establish relationships, communicated important class deadlines, and gave attention and information to students who may not have had internet but did have cellphones and social media.

The need to advocate for their teams, activities, classrooms, and schools and to inform community stakeholders and families influenced Gen Z teacher’s professional practice and their use of social media. Taylor used Instagram to send out meeting notices and results from competitions. Wynn described their social media use as “basically running an educational page like an organization or business.” They said it’s “kind of interesting to see social media from an

advocacy or business platform.” Devin and Wynn both connected the community with their students by communicating on Facebook. Both expressed the fun of posting videos and pictures of student achievements. Wynn articulated the sentiment of both when they stated

That’s just how you connect, even parents now. Gen X and millennial parents are the ones on Facebook and use it as a source of information, and like seeing their kids being recognized on it. It gives them some ownership of the program in a way they are used to since they are on social media all the time.

When hired, Wynn specifically designed a leadership team to support their group’s mission to communicate with the community. They both used Instagram and TikTok “as a creative outlet where the students get to control and push out videos with trends. It’s kind of fun that they take ownership of it.” Wynn went on to say, it takes “less than 20 minutes (a week) to make sure that nothing is inappropriate” as students posted one or two times a week. Alex also supported the many activities they coached through social media, especially one that did not always get the recognition they deserved, so they brought awareness to those student accomplishments. In another aspect, Phoenix and Lincoln both voiced a desire to post positive things about their students and schools as a hedge against the negativity spread by others about the profession. Gen Z teachers strove to advocate and support their students and schools through social media.

The use of social media communication by Gen Z teachers varied by participant and purpose with some who coached or sponsored activities using social media messaging apps as a vital organizing medium. Devin described the need for communication with students as crucial to their mission, sending out travel itineraries, event information, instructions, etc. Taylor needed to communicate with their entire school at times and used GroupMe to send out timely

announcements but used Snapchat with a small group of students for a different class. Sage taught and coached, as do many other participants. They stated Remind was nice because

I can have it set up to have two classes going at the same time. I have a class for my coaching with all their parents, and then I have one for my classroom parents. I can easily switch back and forth and keep everything on one page.

Devin also used the popular BAND app as well as Facebook to communicate with students and parents. With a different perspective, Sage described the reality of trying to balance that “some parents don’t want anything to do with social media, then other parents are only on there.” Their district used the Remind app to send out weather and school-related announcements and also had an active phone announcement system to communicate with parents. The use of social media to communicate with students, parents, and community stakeholders consumed the time of Gen Z teachers but was seen as necessary.

Gen Z Teachers Highlighted Concerns with the Use of Technology

The age of Gen Z teachers places in them in the era when social media became ubiquitous to living life in two realms – real life and online. The students of Gen Z teachers, and their parents, live in those same spheres which demanded that Gen Z teachers took measures to protect themselves. Several Gen Z teachers discussed the establishment of professional social media accounts to use in their role as a teacher and/or coach. Taylor regularly used several professional accounts, and they described the difference between their personal social media and their professional accounts by stating,

I have an Instagram account for school, and I have an Instagram account for me. I try to keep my Facebook totally away from school. If I see someone random that I don’t know

follow the [school] account that has nothing to do with my kids, then I'll block them because I don't want my kids to be blown out on the internet.

A few years ago, August separated their private life and personal life to the extent that they only used their Pinterest account for school and "tried really hard not to mix it with the personal."

Taylor sent messages to a group of students to remind them of a task needing to be completed for a class project from a professional social media profile rather than their personal profile.

Noting the concerns of using personal accounts, Taylor stated they "tried to not give cell phone numbers to kids. Does that always work? No. But I'm pretty cagey about it." In regards to giving a student their phone number, Alex commented, "Oh God, I could never in a million years give out a phone number." Gen Z teachers took precautions when communicating with students and parents. Sage used Remind "as an announcement system. I don't use it as a group discussion. I like that it can work that way. My main disagreement with GroupMe is that everyone can just continue to comment in it." Alex used Group Me as well and echoed some of the concerns of Sage when they stated "It sends inconsistent messages. Sometimes they go out, sometimes they don't, it depends on connectivity. It also gets kind of tough to message [students] if you don't want to send it to the whole group." Social media messaging apps allowed Gen Z teachers to separate their personal cellphone and online presence from their need to communicate through social media at school.

Even with professional social media accounts, Gen Z teachers used guardrails to protect themselves and their students. Taylor, Lincoln, and Phoenix both gave examples of how they post information on their professional social media. Taylor explained, "99% of the time, I don't use last names, just first names. I don't tag locations. I do have the name of my school in my bio but not the town we are located in." Lincoln always made sure that before they posted a picture

of students, they “always cover their faces and never say their names or anything like that.”

Phoenix used social media to promote school and classroom activities yet did so “without using their names and pictures. I don’t post pictures of my students, unless given permission.” Wynn concurred with Phoenix in that they followed a strict policy of parent consent for students to be featured in social media. In a different approach, both Taylor and Sage suggested a filter of “not putting anything that the school wouldn’t have already been likely to publish.” Sage went further and did not post anything from their classroom. If they shared anything, they shared things already posted by school stating, “It’s that layer of privacy. If I did something fun in my classroom, I wouldn’t just take that picture and post it on my account. I would post it through the school page and then reshare it.” Devin detailed their careful use of Facebook to communicate with students and parents

where we have the ability to contact us disabled. On Facebook, it’s a one-way thing. We post and they can’t post back, they can’t respond to it. All of our usage, with students, of social media is a one-way thing from us. If they need to get ahold of us, office phone or email or in-person conversation.

Even with separate professional accounts, Gen Z teachers took measures to ensure the privacy of their students on their professional accounts and further protect themselves.

Gen Z teachers heeded the cautions of mentor teachers when using social media. Multiple Gen Z teachers remarked they took significant measures to separate their professional social media accounts and their personal accounts. Devin and Alex discussed the advice they received from mentor teachers in regards to private use of social media. Devin recalled several conversations with trusted advisors that “reinforced the idea to maintain that clear separation. You see plenty of things on the news of people who don’t maintain that. I never felt the need to

be part of that statistic.” Riley discussed the impact of false online accusations against colleagues by students and cited that as their reason to not have a professional presence on social media. Alex agreed with Wynn and Riley stating they had “seen a rise of teachers kind of showing more of their personal lives on social media to students. I don’t particularly care for that. Kids will definitely take advantage of that; in that they will see you as friend.” Alex recalled their mentor teacher who always said, “we’re friendly, we are NOT friends. I will help you however you need, but we’re not gonna go get a bite to eat...I set pretty hard boundaries and sometimes it looks like they’re just crushed.” Later, Alex reported that students, for the most part, had been respectful of the boundaries they set. Due to the personal nature of social media, Gen Z teachers set up boundaries using separate professional accounts, if they use social media professionally, to ensure protection from the darker side of social media.

Gen Z teachers recognized the negative consequences of social media use. The embedded personal experience of Gen Z teachers allowed them to use social media to their advantage, yet they also saw the downside for themselves in their mental health and work boundaries. Phoenix observed the sentiment of peers by saying, “I feel like my mind’s always running on school, as unfortunate as that can be sometimes, and unhealthy. I think constantly. When I’m on social media, I’m thinking about school.” August felt like their

work-life balance is super important. I don’t think mixing them is good for your brain.

Before I separated my [social media], that’s when there were downsides. I was never off the clock. If your scrolling and things pop up, you start thinking about this and that and you’re never clocked out. Which I don’t think is healthy for anyone’s brain.

Devin emphasized the comments of Phoenix and August stating, “I think a lot of the struggle to shut off our brains after we’re done with the day, and so I see something like that, and I’m like, oh that cool.” Sage admitted, they

would love to say I have a strong enough boundary to [separate school and home], but the truth is no. That’s a goal for me but being a teacher is definitely such a solid part of my identity...It does not take any time at all to be watching reels and immediately get sucked into what they call ‘Teacher Quit Talk’. I try not to linger on it too long. I always tell my colleagues that is when I know I need to stop scrolling.

Gen Z teachers recognized the lingering effects of their social media use yet struggled to limit use on their personal time.

Finally, from a higher altitude view, some Gen Z teachers philosophically reflected on the impact of social media on their profession. Sage rationalized that teachers as a profession view social media differently than their same age peer reflecting

I like to think I’m a bit unique about for my age. I’m actually really not a fan. There’s value, but I am definitely not one to back it. I see more teachers [my age] being on this side of the fence compared to peers our age. I think our profession definitely plays a part in why we feel that way about it.

Chandler, who has no social media presence, observed of their colleagues at school,

I would say that I think most people view it as a benefit, only because they’re enmeshed in it. I feel like as an outsider, hearing their experiences and seeing their use, I’m kind of saddened by it. I actually don’t think it’s doing as much good for them as they think.

Their first response is , “I can’t delete this because it helps me as a teacher”. But I feel

like in reality, when they're describing things they see, it's just these idealized, perfect scenarios.

Later in the conversation, Chandler perceived negative results from social media concerning their experience with new, just out of college teachers in their building. Chandler did not see social media as a benefit for pre-service and new teachers. They mused

I get really nervous about all the college graduates who come to the profession super wide-eyed, with rose-colored glasses. They say, "I've wanted to be a teacher since I was six years old, and I follow all these pages, and know all these things." And then they step into the classroom the first time, and it's like a brick hits them. I'm like, yeah, because you lived in a fairytale land during college, but now you have to live in real land.

Addressing the current state of social media and the algorithms that govern it, Madison reflected,

I feel like social media is now pushing what's algorithmically popular versus human engagement. Facebook used to be a place where I could find friends' posts and see what they are doing, but now it's about here's this group that's posted AI pig slop. I have no interest in seeing that.

Madison also lamented, "I used to use Twitter more...in terms of sometimes saying, I'm doing

this, does anybody have any ideas?" Instead of Twitter, Madison switched to BlueSky but

asserted it is "just about the same things over and over again because that's what's

algorithmically popular versus something that's actually providing meaningful discussion, it isn't

interested in people posting diverse things but pushing what's currently trending." The

algorithms used by social media companies may determine what Gen Z teachers see and learn as

they network and scroll.

In an effort to ensure the confidence of the community and parents or to avoid controversy, several Gen Z teachers expressed using caution as they produced content on social media regardless of whether it is a private or a professional account. Phoenix bluntly offered, “I live in a fishbowl” and noted that

since I’ve become a teacher, I have been more conscious of what I am doing on social media. I’m very diplomatic about what I share. Even though your First Amendment is freedom of speech, if you’re not careful and someone disagrees with you, they have the right to fire you if it’s any kind of policy where you’re crossing the line.

A different participant shared a story of a colleague caught up in a situation involving private social media and outside of school behavior which resulted in action by the school board. When using social media, Madison intimated they

post fewer political things. If I do post something political, I want to make sure it’s nuanced...it’s especially important now. Just because a thought comes into your brain does not mean you need to post it on social media. It is important for [parents] to see that the adult who is looking after their kids is someone they can trust. It’s not just about representing the school well, it’s also about assuring the parents that your kid’s teacher is somebody who values them even if they are different.

Madison went on to say, “in a way, it’s self-censoring but I think it is a good mechanism to regulate my social media use. Maybe it’s good I’m self-censoring.” Gen Z teachers revealed multiple ways they use caution as they post on social media to protect themselves from possible backlash and lawsuits.

Not just social media, Gen Z teachers expressed caution and skepticism in the use of AI. Only two participants discussed frequent daily use of AI in their classrooms, while the other nine

expressed distrust and hesitation. Use of AI tools ranged from zero use of AI to use of district-suggested AI tools to use of AI tools specifically designed for teachers to use of general AI tools. Concerns about using AI by teachers ranged from environmental impacts to the questioned ethics of how the LLMs were taught to the perceived inauthenticity of using machine learning in a human-driven profession.

Gen Z teachers recognized the potential time saving advantages of AI yet remained skeptical due to questions of unreliable results. Devin expressed the sentiment of most participants, saying, “Technology can make our lives easier, but it can make it more difficult in ways, too.” Taylor illustrated Devin’s concern as they described the perceived difference between using an AI tool and a search engine by saying,

I think with the ability to use something like Google, you are able to have all of your sources available to you. When it's AI, if it just gives all the information to you, you don't know where the information is coming from, and it might be wrong.

Taylor expressed their personal reluctance to use AI as an education philosophy when they stated

AI is a necessary evil that I’m probably going to have to get used to, but I’m stubborn. So, I’m holding off for as long as I can. It’s something I try not to do, just personally, right? And then I try to keep my students out of it because you need to learn how to do something first.

Riley expressed skepticism about AI, yet admitted they

think it [ChatGPT] can potentially have benefit in diving down to more of those complex questions. That algorithm is pretty decent at compiling a lot of information far quicker than I ever can. Where, of course, it gets dicey is what the validity behind it is. You know, not something you want to trust wholeheartedly, but can get you going.

Riley went on to describe their use of AI tools and their concerns about the long-term impact on how students think critically, and problem solve, stating

I use it minimally, as minimally as I can. I think it's a fun tool to use, glorified, better than Google Search. I see ChatGPT really, really limiting thinking and independent work. For those who have figured out how to work the system and how to work the tool, I think they can be off to the races. But for those who use it as a replacement for their own skills, that's where it gets scary.

Gen Z teachers focused on student learning in their classrooms yet remained cautious as they added AI into their professional practice.

The machine nature of AI caused concerns for Gen Z Teachers. They related in various ways that they viewed time as a measure of their own perceived value to the person using the AI tool. They described circumstances of administrators and colleagues using AI tools for emails, teacher evaluations, recommendations, and other communications, which lacked a human touch. Gen Z teachers valued authenticity and sincerity in professional communications and actions.

When discussing colleagues and administrators using AI to generate communications, Sage stated, "I guess I think there's just a human element, too. I have witnessed so many times where things, without the tone of voice or the body language, come across the wrong way." They went on to express a deeply personal view on communications, "whenever you think about [AI] writing, communication, there's no authenticity to what you're saying at all." Wynn supported Sage's concerns with using AI tools to generate student recommendations by stating, "if a student asks me for a recommendation, I'm going to sit down and do it, because to me, they're worth that 15-20 minutes it takes to do that." Taylor expressed significant apprehension, yet

resignation, about using AI technology in their classroom, and brought up AI prior to being asked, and then stated

I don't know if this is coming up, but I am very much not for it. Which I'm going to have to, because that's the world we live in. But the real human aspect, I think, is something that I really consider and look for...I think AI is a necessary evil that I'm probably going to have to get used to, but I'm stubborn. So, I'm sure, eventually, there will be things that I like about AI that I'm like, yes, let's do this.

Gen Z teachers recognized the integration of technology in their lives and their classrooms. They spent time and effort reconciling the impact of technology on their professional practice and students. While reflecting on this use of technology in their classroom, Chandler stated

I just don't want to do anything, blindly or mindlessly. I want to be principled, so it requires that I think deeply about the integration and the ethical concerns. At this point, it's not the direction that I want to go, let alone have my students go, and so it's for that reason I won't be using [AI]. Maybe that will change, maybe that will not change, but in its current state, I don't think it's a net positive.

While recognizing some advantages, Gen Z teachers remained guarded as they learn about and integrated the use of AI in their professional practice as well as the implications of that use on students in their classrooms.

Gen Z teachers on the front lines of technological change approached AI with caution due to concerns about the potential impact on student learning and the perceived loss of human authenticity. Learning about AI and how to use it effectively takes time. Many Gen Z teachers remained unsure as to how to use it effectively. Lincoln expressed the concerns of many participants when they said, “Honestly, I have a lot of learning to do in that department. It kind

of weirds me out a little bit. What is this? When I need a worksheet about this, [it] gives it to me in 20 seconds.” Chandler described an initial intrigue and positive interest in the potential impact of AI on educators and classrooms. They dove in to research the options, strategized with colleagues, and became a noted expert in their school district. Eventually, that enthusiasm waned as the impersonal machine nature of AI surfaced. They stated

I do not doubt in my mind that AI could write a perfect lesson plan that accounts for every unique student that I have in class, and, you know, is high engagement, and was supported by state standards. At the end of the day, no student wants to sit and have an AI voice read over a loudspeaker to them. They want a teacher to look them in the eye, care about who they are, and help them on their learning journey. And so, I'm gonna keep doing that without the help of AI.

Chandler later indicated they no longer use AI for anything in their classroom, which was concurred with by Wynn. Riley echoed Chandler’s concerns about the loss of human connection and basic skills of students and teachers when they stated,

Our success as teachers comes from communication and partnership with others. Your own personal skills and the combination of those two is what makes a great school and a great team. Losing those personal skills due to technology can be really troublesome

Gen Z teachers spent time and energy contemplating the use of AI in their classrooms and then used caution as they proceeded.

Gen Z teachers highlighted questionable uses of AI as they expressed moral and ethical arguments along with the conundrums of modern-day technology. The machine nature of AI and its creation using large data sets of questionable origin caused concerns for Gen Z teachers. Voicing the concerns of several Gen Z teachers, August stated

I try hard not to [use it], just because I believe a lot of it doesn't have a good data set behind it. I believe that a lot of the data maybe wasn't even collected in a morally acceptable way. I try so hard not to participate, but I'm human.

Wynn highlighted another ethically debatable use when they stated, “I know a lot of teachers use it for lesson planning, or for writing rubrics, or for writing recommendations, and I refuse to, just because I don't want to.” Phoenix elaborated on Wynn’s concerns,

I think that it [AI] needs to be monitored more closely. I know one of the principals in the past was using it for teacher evaluations. They forgot to take out “insert teacher's name here”, so one of our teachers caught it in their teacher evaluation.

Devin and Wynn supported August’s statement by highlighting concerns as people use AI tools to create work rather than utilize human ingenuity. New uses of AI by teachers and administrators offered new ethical and moral challenges to the work done by education professionals. In regards the use of AI tools, Madison emphatically expressed, “Every time Facebook recommends me use AI [to] generate a lesson plan within a minute, I want to burn it with holy fire.” They went on to nuance their answer regarding colleagues who use AI. They stated, “I can understand that, sometimes teachers, God knows we are often overworked, you just need something done, or if you maybe didn't create a subplan because there's a family emergency, I can understand that.” Yet, personally, Madison expressed, “I'm sure it has uses, and I'm sure I'm just a Luddite, but I consider it antithetical to learning. The biggest effect AI has had is that my classroom is on the verge of basically turning to slates.” Due to questionable uses by administrators and other teachers, Gen Z teachers expressed definite opinions on AI use even as they saw the benefits.

Gen Z teachers valued their own capability and capacity as teachers due to the independence and respect gained from authentic lesson planning. Alex explained, “In general, I kind of have a distrust for it. I never want to use something as a crutch.” Madison expressed a different angle to the issue of teacher competence by recognizing the student perspective of teachers using AI. They shared conversations they had with students, which illustrated the skepticism of students. Madison stated

Ironically, with all the concern about students using AI, I have had several students say to me, “Why do our teachers use AI to generate lessons when they don't let us use it to generate papers?” The kids sense fakeness.

Gen Z teachers reacted negatively to the lack of authenticity and sincerity of AI use as they found themselves questioning its use, and students question the rationality of teacher use as well.

In regards to school districts using district monetary resources for professional development, several Gen Z teachers reported being given time to explore AI tools and their potential use in the classroom. This use of professional development time in lieu of other options puzzled many Gen Z teachers. Wynn expressed dismay at a lesson plan they had to create during professional development, saying, “I found I had to go back through and check everything. I just didn't trust it very much. I may be wrong, again, because I don't use it very much.” Experience with AI during professional development baffled many Gen Z teachers due to their skepticism of AI for their own professional practice.

Gen Z teachers exposed the perceived benefits and challenges of using AI tools in the classroom. They saw the impact of technology on themselves and their students and remained skeptical as they experimented, citing time as a factor. Balancing the time demands of the classroom with skepticism for new technology challenged most participants. Many reported

instances of returning to paper and pencil as a result of experience with AI or concerns about the lack of student learning due to a reliance on AI tools to complete class work as the check of a box in lieu of learning. The human factor of teaching seeped through their comments, philosophies, and behaviors as Gen Z teachers reacted to machine generation of products for the classroom and used AI with caution.

Gen Z Teachers Preferred Administrators Use Technology with Competence

Gen Z teachers expected administrators to display competency with technology to improve the effectiveness and efficiency of their schools, appreciating technical solutions that improve efficiency and benefit students. Taylor described an online system of tracking student missing assignments as helpful because they used it to determine eligibility for activities/athletics and helped students catch up in classes. Wynn illustrated the importance of calendars by using the habits of two administrators to illustrate

one I had previously was really bad about cross-referencing all the schedules coming in.

We would send stuff to him, and it would not do any good. He wouldn't communicate or follow up, so frustrating. Another one does a pretty good job of keeping everything organized, communicating issues or conflicts, or working on making schedules work.

Due to the secluded nature of classrooms, Alex suggested they appreciate it when administrators “take the reins and search for things teachers could trial, a new website or program with a few teachers, because they saw it and thought it might be good, hopefully guiding us to some good resources would be fantastic.” Wynn wished administrators understood just how many programs teachers are expected to use describing a school webpage with “15 different icons for them to select from to go to things for grading, for discipline, requests for transportation or leave, scheduling facility requests, it's actually kind of insane.” Wynn conceded they did not know if

this was possible but wished “everything could be on one platform, like scheduling, communication, class information or student information, like the demographics and stuff, the behavioral, recording, grading all could be in one place.” For instance, Wynn explained, “we use one platform, and the district doesn’t provide Google, so calendars and other communications are all independent. So, three main student areas [behavior, attendance, demographics] are all separate logins.” Taylor delicately described a principal who was “not so tech savvy” and expressed, “It is imperative, especially with technology we use in the classrooms now, and that kids have in their back pockets” to work to be current on all aspects of technology. Several Gen Z teachers noted instances of efficiency or lack thereof regarding the technological competency of their administrators.

Gen Z teachers expressed skepticism in the decision of administrators to use technology as a shield rather than deal with teachers in person, citing instances of trust and dodging backlash from unpopular decisions. One Gen Z teacher reflected on the use of online communication, rather than in-person meetings, stating,

Honestly, I feel like technology is somewhat of a shield for some people. For example, our superintendent loves to send out a newsletter every week telling us how much he values us, and one could see that as a positive thing. But one could also see that as a way for him not to actually directly talk to us. For example, he sends out the email [giving bad news], and he doesn't tell us that face-to-face. I think that encourages teacher resentment, where they're like, really, you can't even come talk to us in person about these changes, you're just constantly sending out a newsletter about it.

Another interpreted the choice of a district to purchase expensive curriculum materials as “the notion that we don't trust you to teach, but we do trust this expensive textbook we bought to

teach.” They went on to explain that the same district intended to track use of the website by students and teachers. Gen Z teachers expressed concern and dismay at the use of technology to avoid the tough conversations expected of administrators. Use of technology as a shield was seen as an attempt to circumvent some negative feedback on policy from district or building decisions. Gen Z teachers preferred face-to-face conversations over technological communications with the delivery of challenging news about budget cuts and personnel.

Gen Z Teachers Found the Plethora of Technological Options Used by Administrators Overwhelming

The explosion of technology over the last 25 years led to a plethora of options for school administrators to communicate with their staff. Sage described a dual system at their school, one based on cell phones with the other on email and computers. Their school used a

staff chat [on the GroupMe app] so that if [a student] is gone and we need everybody to help us find them, we message ‘Hey, search and rescue’. We have a little card that has the names of certain procedures on it. Let's say a kid's having a moment, but you want to build your relationship with them. So, you type ‘flip-flop’ in, and the student's name and your location, and my admin will come down and take over my room so that I can go on a short walk with that student. But not everybody needs to know everything. So, I can text just my admin on it.

Teachers were also expected to keep up with a steady stream of emails coming from multiple stakeholders. Sage continued their explanation by stating,

You either keep up with one or the other [GroupMe or email]. I feel like the people that keep up in the GroupMe probably aren't as fluent about checking their email, and I check my email more, and I'm not caught up in the GroupMe 99% of the time.

Lincoln endorsed a system that they felt worked well in their school and district, stating,

Our principal sends out a weekly email, and it goes through all of the things that are going on in the building, highlights of the week for certified staff and classified staff. If there's anything that we need to do, a survey, admin out of the building, including time, where, and days, or anything that needs to be covered on our end, that is where it will be. I always know to look for that weekly email. District admin sends out a lot of emails if a district-wide event's going on. The superintendent sends out a monthly-type thing, or something, before break from the custodial people to make sure we turn off things and unplug all of these things. Technology plays a big part in communication in general, from district admin and building admin.

Wynn pointed out difficulties, due to the lack of a unified communication style, when working with several administrators in one building who all preferred different communication styles.

One preferred email, one responded best to text messages, and another preferred teachers to set up a meeting using Calendly. Alex preferred teachers be notified prior to parents and the community on issues such as snow days and other significant announcements, if possible.

Navigating the web of digital communications led to confusion for Gen Z teachers to determine how to contact, the level of urgency, and the appropriate program or app to use to communicate with administrators.

Gen Z teachers appreciated knowledge of relevant conversations in regards to building and district leadership teams who made decisions that impacted them and their classrooms. Riley shared a common structure of representation in schools for decision-making. They stated

We have a BLT, building lead team committee, and theoretically, each member is from a content group, and they are supposed to be advocating for you. I don't know how much that's actually happening, because I don't ever hear back from them, and nobody asks me my opinion. In terms of micro-scale issues, something at the building level, I'd like to have a greater say.

August concurred, adding, “I feel pretty good about our leadership. Sometimes communication is incoherent. I wonder if that's my department head not communicating effectively. I don't know where the weak link is, but someone's a little bit weak on communication.” Sage noted a drastic difference between the two districts in which they taught, in one, “there was a massive lack of communication, and now there's an overwhelming amount” to where they cannot keep up. Gen Z teachers appreciated simplified communications and when their representatives on building and district leadership teams used technology to be responsive to their concerns and needs.

Gen Z Teachers Sought Flexibility and Curiosity in Online Teacher Evaluations

Gen Z teachers reported challenges with the use of online data recording platforms in teacher classroom observations. They appreciated it when administrators set the technology aside to offer personalized feedback. Devin described the challenges technology presents when using online teacher evaluation tools by observing

just right in line with some of the skills our students have lost as a result of the prevalence of technology in the classroom, just the same way as with us adults and with administrators, is they've lost a lot of flexibility and that ability to adapt and think critically, evaluate what they're seeing in the classroom.

Some Gen Z teachers reported they preferred a more personal, individual approach by administrators to offer support for teachers with or without technology. Lincoln remarked Gen Z

I think being present in the classroom is a big one. Just coming in, not necessarily to observe or to fill out any type of form, but just be present, have a relationship with the teachers, have a relationship with the students.

Alex also spoke to the benefits of a quality, dedicated classroom observation by an administrator, by exclaiming

we have a fantastic administrator right now. She'll come in the classroom all the time, and she'll just kind of watch, see what's going on, and she'll give feedback every once in a while, if she thinks, hey, you know what, maybe try this, maybe not, hey, it's up to you. So, kind of a hands-off approach, but also at the same time, I do understand that there does need to be, at some point, a little bit of hands-on, and I think she does a really good job of balancing those two things.

Gen Z teachers preferred face-to-face conversations over technological systems such as evaluation software, especially with challenging news or about their performance in the classroom.

Gen Z teachers preferred administrators who valued their contribution to the school community, regardless of content area, or the background content or grade level experience of the administrator, as they used the online teacher observation/evaluation software required by many schools. Several teachers saw this system as a barrier to quality data and feedback, due to its structural inflexibility. Riley observed about the use of online software, stating

I think sometimes the administration can get caught up in this self-made game by the district. The district administration has created a game that the local administration has to keep up with, and they use this technology to check all these bubbles. I think it could be a tool, but we've landed in this place where we're self-absorbed by the technology.

Devin commented that when administrators observed teachers looking for use of school-wide initiatives and

criterion that [administrators] don't consider how different disciplines do things differently...just in my 5 years of experience, it's usually admin who only taught for a few years before they went and got their certifications, who blindly adhere to this observational thing...if you walk in and see the middle of my lesson, don't dock me for not having an exit ticket.

Devin went on to comment that their class required time for students to clean up to transition to the next class, which inhibited the use of exit tickets, yet they are expected. Riley added to the conversation by stating that during

administration walk-arounds, and they'll pop into classrooms for 10 minutes, and do a micro-observation, and I'm going, are you really observing my class? Are you really seeing what we're doing and getting to understand how these kids are learning? Or are you looking, [check] box, looking, [check] box, looking, [check] box. Oh, hey, kid, do you know what the learning objective is? No? Okay, cool. F for the teacher. Oh, joke's on you. He hasn't paid attention all year, and we're developing a plan to get him in place, you know?

Gen Z teachers recognized the administrative challenges to meeting observation expectations from above them as well as time logistics involved in observing classrooms using technology yet expressed concerns about the constraints of the system.

Gen Z teachers expressed concerns with the current system of online evaluation tools used in many of their schools. Devin warned yet conceded the necessity and efficiency of online evaluation tools, “I think one of the big dangers is having a giant homogenized [software

program], there's no good way to not have this, but it's also dangerous if we just blindly adhere to it." Madison perceived, "I guess they use online forms to fill out the evaluations, I guess that allows for speed. It also allows you to maybe re-read the feedback a little more easily." The Gen Z teachers interviewed all agreed with Devin's sentiment, "Ultimately, I'd rather not be observed than have bad observations or not get feedback, rather than have bad and unhelpful feedback. It would be really nice to get feedback from a high-level [content area] person kind of regularly." Wynn provided an example of that unhelpful feedback, asserting,

because as a young, ambitious person who is pretty capable, I don't get anything out of showing up and them being like, "Yep, you're doing good at your job, thanks." So, whether that's formal like an evaluation post or even if it's just an informal check-in.

Gen Z teachers expressed value for the time and quality of the feedback they received from online evaluations completed with fidelity by administrators in their classrooms.

Gen Z Teachers Showed Discernment When Using Technology to Learn About Education Policy

Gen Z teachers searched for information about education policy using websites of legacy media, government websites at all levels, and social media. Madison sought information about the downsizing of the U.S Department of Education from online newspapers, stating, "I will usually try to read news articles from something like The Guardian," but "we're currently going through a teacher shortage, so I do try to read the local news articles on that." Devin revealed they have a set of go-to websites stating, "I generally go to the ones considered to be the least biased. I try to gravitate towards AP News, Reuters, BBC, things like that. I don't frequent MSN or Fox." Sage reiterated, "I feel like people who've been in education longest have the most knowledge. So mostly mentors, but I would also say I might dabble a little bit online. I don't

have trust for that, but if I were going to, I'd want to look it up directly." Chandler, Taylor, and Riley depended on their own research starting with what Taylor referred to as "my good friend Google looking at reliable sources." Riley said they, "would start with basic research, just Google the change that's coming and then go through reputable sources and try to find an objective opinion that just gives me the facts and allows me to interpret it as an individual." With a bit of skepticism, Devin expressed

if I trust the government website, I will look there. If not, I will look for the original version of it. Like, if it's a law or something that they're debating, I will go and look for the original version of that. Or, if I can find something that is de-legalized so that I can actually, understand it, I will look for that. Again, I usually start on government pages, and then I go digging. If it's being debated, it's usually in the news somewhere, and so I can usually find it on those news sources. So those are usually my first stops.

Alex, Wynn, August, and Devin all initiated searches on the KSDE website when looking for information concerning state education policy. Describing their use of social media to research education policy, Taylor hesitated, stating, "I'm not even gonna read the articles right now, I'm just gonna scroll past it, because I don't even want to think about it and just get myself mad thinking about it." August concurred, stating, "I got to a point where I kind of stopped following the education news, just because it was making me a little sad and feeling a little bit hopeless." Lincoln reconciled their lack of education policy knowledge, stating, "I'm just not a big news watcher, you know? It makes me sad, there's a lot of negativity. I'm a very positive human, so I try to focus on the happy news, which sometimes there's not a lot of." Taylor summed up most Gen Z teachers by concluding that when asked about their knowledge of education policy,

Just straight out. Not a lot. It's probably not a great thing that I don't know how these outside forces are impacting me, but a lot of the time, you try and look stuff up, and then I get frustrated, so I stop.

Gen Z teachers expressed confidence in their ability to find reliable information about education policy online but found it stressful to use social media for the same due to negativity.

Gen Z teachers defined education policy in the ways they see it impacting their jobs and classrooms. Alex determined education policy as “guidelines to help kids in the simplest terms. These are guidelines that we have as teachers or school districts in order to best help our students.” Phoenix expanded on Alex’s definition, stating, “I think of learning...so what are the rules put in place to help education be an effective learning space?” Sage went into more detail, stating education policy is “things passed by the legislature that affect any educational organization.” Riley continued with a more legal definition that education policy is “a set of laws and guidelines developed by districts and states to guide administrators and teachers through the process of educating students on predetermined topics.” Wynn focused on oversight, further stating “legislation that controls what we can do in education, funding, guidelines on what we are allowed to teach.” Taylor suggested education policy is “things I have to do, or I can’t do...the hard and fast.” Devin deadpanned their response as “a mess”. Lincoln summed up the rest of the participants, stating, “I guess when I hear policy, I think of official, important rules and regulations, the ins and outs of education...what needs to be followed, the purpose of education, the rules behind it, and what everyone needs to know.” Overall, Gen Z teachers understood education policy as the rules they are required to follow as they make professional decisions in their classrooms and set the expectations of themselves as teachers.

Gen Z teachers expressed apprehension when asked about education policy. Riley summarized many when they said, “I really probably should be a lot more knowledgeable about the education system and policies coming my way than I am. I really classify myself as ignorant to most things [education policy].” Evidence of education policy showed throughout the discussions with Gen Z teachers, yet they were slow to recognize it. Most expressed the need to know more yet identified time as a factor in their lack of knowledge when it existed.

Themes and Subthemes

The use of technology as described by Gen Z teachers and aligning the themes with the research questions is summarized in Table 4.2. The discussion of participant data are detailed by the three research questions and divided into themes and subthemes that highlight the insights and perceptions offered by 11 Gen Z teachers over 22 interviews.

Table 4.2 Research Questions and Themes

RQ1: How do high achieving Generation Z teachers use technology to shape their professional practice?	Influence of Time on the Classroom Use of Technology by Gen Z Teachers Gen Z Teachers Value Online Professional Learning and Networking Gen Z Teachers Use Technology to Meet Learning Standards and Enhance Depth of Instruction Gen Z Teachers Use Social Media to Communicate Gen Z Teachers Highlighted Concerns with Use of Technology
RQ2: How do high achieving Generation Z teachers prefer administrators to use technology when they lead?	Gen Z Teachers Preferred Administrators Use Technology with Competence <i>Gen Z Teachers Find the Plethora of Technological Options Used by Administrators Overwhelming</i> Gen Z Teachers Sought Flexibility and Curiosity in Online Teacher Evaluations
RQ3: How do high achieving Generation Z teachers use technology to shape their knowledge of education policy?	Gen Z Teachers Showed Discernment When Using Technology to Learn About Education Policy

¶Summary

The findings from the analysis of this study resulted in eight themes. These themes align with the three research questions. Research Question 1 revealed findings in three significant technological areas which included social media, TFWs, and their use of AI by Gen Z teachers. Research Question 2 yielded insights that Gen Z teachers preferred administrators to express competence when they used technology to lead. Competence was recognized in efficient use of

calendars, communications, and not using technology as a shield. While Gen Z teachers expected their administrators to be competent with technology, they preferred face-to-face conversations for important communications. In addressing Research Question 3, Gen Z teachers discussed using websites from legacy media, governments such as KSDE, and other trusted sources when they sought out information about educational policy. These findings, in many ways, made Gen Z teachers unique to their older generational colleagues. This uniqueness expressed itself in their seamless use of technology as time impacted their decisions to use it whether that be social media to find a resource or an AI model. Online textbooks and curriculum offered Gen Z teachers more data about student learning than prior eras which they used in sorting their students into groups, discovering learning gaps, and then finding appropriate technological options to address student needs. Other generations of teachers used these district-purchased technologies as well, but Gen Z teachers experience with technology growing up helped them to do it faster using their skill advantage to find supplementary resources on social media following influencers or through relevant TFWs or AL produced materials.

Chapter 5 - Discussion and Conclusions

This study explores how high achieving Gen Z teachers use technology to shape their professional practice and knowledge of education policy. This research further explores how Gen Z teachers prefer administrators to use technology when they lead. Specifically, the study explores Gen Z teacher's use of the technologies of social media, TFWs, and AI in reference to their professional practice. The Gen Z teachers studied showed preferences in how education administrators to use technology when they lead and competence in their own use of technology to shape their knowledge of education policy. The conceptual framework of Just-In-Time Learning (Clope, 2022; Gartner, 2020) offers an opportunity to examine how Gen Z teachers use technology in their professional practice to find information and resources just when and where needed. This chapter first discusses the three research questions. Then, the research questions and themes will be discussed within the conceptual framework of JIT to be followed by implications for practice, recommendations for future research, and significant conclusions.

Research Questions

This section addresses the three research questions in sequence. The primary question about professional practice will be addressed first with a thematic discussion of the general topics of social media, TFWs, and AI in regard to professional practice. The second question follows with a discussion concerning how Gen Z teachers prefer administrators to use technology when they lead. This section concludes with the final research question discussed in regards Gen Z teachers use of technology to shape their knowledge of education policy.

Research Question 1

The first research question was: How do high achieving Generation Z teachers use technology to shape their professional practice?

Research Question 1 focuses on the use of technology by Gen Z teachers to shape their professional practice in large and small ways using mediums such as social media, TFWs, and AI. Today, technology encompasses many platforms, programs, applications, and formats which are available on computers, tablets, and cellphones. This research study narrowed its focus to social media, teacher focused websites, and AI due to the prevalence of these influences in the lives of Gen Z teachers and their availability in the classroom and for use in schools. Teachers in the classroom use significant amounts of technology for organizing class assignments, maintaining student records, and enhancing pedagogy. Lynch (2022) reported that “68% of all teachers now report EdTech has become essential in the classroom” (p. 14). Gen Z teachers reflected the findings of this report as they used a variety of websites and online programs designed for educators.

Time factors into the use of technology by Gen Z teachers. The daily tasks of teachers to plan, teach, assess, manage data and communications, and design enrichments to challenge students above grade level while finding accommodations for those with learning gaps stretches the capacity of any Gen Z teacher. The teacher-to-teacher online marketplace of ideas (TOMI) as described by Shelton et al. (2024) references the online spaces where teachers discuss ideas, gather innovative methods, and search for ways to meet student needs. Education influencers of social media, sponsors of websites, or district purchased curriculums, offer tips, tricks, background information, and resources which are searchable. Phoenix appreciated the convenience of social media because at the touch of a hashtag “anytime I have questions, I can go and put in a #hashtag, and I can look it up, it connects me with what I need.” This notion to quickly look up a needed resource reflects the Gen Z teacher’s use of JIT. AI aspects of district-purchased technology offers teachers programs which diagnose student competency on standards

and then designs tutoring options to bring the student up to grade level (Chardonnens, 2025). Using one such program, Sage confidently offered, “I know exactly where my students are, I know exactly what we’re practicing” which they can then “put in Canva [AI] when making them a worksheet.” Gen Z teachers also found AI useful in the extra things needed in their day such as in the case of Riley who needed a makeup test for absent students or August who, due to student behavior choices, found themselves in need of an analog lesson for a student without internet and computer access for a week. Taylor, Lincoln, and Alex both used AI to produce emergency substitute plans with time of the essence. Taylor explained, “I’ll put the YouTube link video in there, and I’ll watch the YouTube video, and I’ll have it make questions, then I’ll check everything.” In their role of promoters of all things school, Gen Z teachers showed proficient use of Canva to produce promotional materials, sharing high quality posters to promote classroom projects, school activities, grade level competitions, and more which would have required significant cost and professional printers prior to this technology. Gen Z teachers default to technology when pressed for time to ensure they meet the needs of their students and schools.

Gen Z teachers go to social media to find ideas and learn from their online peers. Stillman and Stillman (2017) referred to the Gen Z cohort learning in the physical world and digitally as “Phigital”. Prestridge (2019) explained that Gen Z uses social media “for self-generating professional learning through their online professional learning networks” (p.145). Seemiller and Grace (2019b) suggest that students of this generation *learn alone together* which means they prefer to learn from others, but at their own time and place of choosing. The drive to network, search for new ideas, find ways to accommodate student needs, and share their expertise with peers all matches the aspects of social media that Gen Z teachers appreciate as they learn on their own time (Carpenter et al., 2020; Carpenter et al., 2023; Prestridge, 2019).

Social media allows Gen Z teachers access to resources 24 hours a day, seven days a week to informally collaborate with other teachers across the globe from their own home reflecting their use of JIT (Prestridge, 2019). Devin and Wynn both actively engaged on Facebook and Instagram with colleagues across Kansas and from other states they had met through professional conferences to find tips to help students and new resources. Wynn posted for help with an issue specific to one student and multiple members of the Facebook group responded with ideas. Gen Z teachers seek to improve their professional practice using social media to find teachers of similar interest, background, school setting, subject area, grade level, or expertise .

Most Gen Z teachers discussed online professional learning, formal and informal, as a part of their personal approach to work and life. Gen Z teachers live in a world where knowledge is key and this “implies social transformation in which citizens need not only knowledge but also new skills and competencies” (Hernandez-de-Menendez et al., 2020, p. 2). The pace of technological change in school software, curriculum revisions, needed student accommodations, and dropping attention spans of students requires Gen Z teachers to know how to learn about technology and constantly search for new ideas. Gen Z teachers discussed using online resources due to convenience and quality. August made a point to find, “hour-long video recordings of (online) professional development [on Reddit or Pinterest] and watches for free”. Taylor, Wynn, and Lincoln all enjoyed watching other teachers go through a lesson idea on Instagram or TikTok so they could hit pause to think about how it might work in their classroom setting. They also agreed they found it “cool to see what other teachers are doing.” Lincoln gave an example of an edu-influencer on TikTok they follow due to their innovative ideas. The edu-influencer explained a “tent vocabulary game” their students enjoyed, the steps to set it up, why it worked, and how their class reacted. No longer limited to something *done to* teachers on certain days of

the school year with lead teachers, instructional coaches, and out of district experts, professional learning occurs regularly off contract hours for Gen Z teachers. All this access does not make Gen Z teachers “more intelligent or smarter and [they do] not know more than other generations; young people today just have multiple sources of information and know how to use them the right way, and in addition, how to do this incredibly fast” Szymkowiak et al. (2021). This speed and competency with social media shapes the professional practice of Gen Z teachers.

Gen Z teachers use technology to their advantage as they prepare lesson plans, manage assessments and data, and play their part in the overall education of their students. All Gen Z teachers mention aligning their classes to expected learning expectations of their school, district, and the state such as the KSDE online curriculum webpages used to ensure their pedagogy meets expectations of grade level and subject (KSDE, 2024). August used the KSDE online curriculums to monitor the progress of other classes so that they might mesh their own instruction to support the efforts of other teachers. Several Gen Z teachers showed savvy navigating district purchased reading curriculum, writing curriculum, math curriculum, science curriculum, etc. These programs offered in conjunction with or in lieu of textbooks give districts the power to streamline instruction and collect data to monitor student progress. Lincoln explained that if the district curriculum failed to meet their needs, “I go to TPT and try to find things other people created based on those curriculums.” One artifact offered by Phoenix of a TPT lesson used included detailed instructions, a rubric to assess the project, a template for students to use, and a quality example. Carpenter et al. (2023) cautioned the lack of regulation for quality or a filter for bias on these sites. Gen Z teachers expressed their skepticism of most things on the internet and regularly checked the validity of products. Gen Z teachers took steps to check the validity of edu-influencers they follow. Taylor explained that “on Facebook, you can

click on their name in the group and click ‘View Profile’ and see that it is an actual human being that has lived a life and seen stuff.” Lincoln consumed more social media than most participants, and their level of scrutiny reflected this. Lincoln looked for “ideas from people I used in the past, looks to see what others have said, who the influencer follows, and who follows the influencer.” Not stopping there, Lincoln followed the same edu-influencer on multiple social media platforms and looked for consistency, if that was found they “are more willing to trust things going forward.” Use of sites such as TPT and posts by edu-influencers leads to Gen Z teachers to circumvent the careful vetting of school district curriculums and instead utilize ideas and innovations which may not correspond.

Gen Z teachers use technology to find alternative ways to present concepts. Chandler and Riley related using Khan Academy videos to their advantage. Chandler explained that they “start with the Khan Academy video, then I break down what they were doing. I have the students practice it. Then, we go over what they were practicing together.” Riley explained the use of online simulations that they and August used to mimic processes not feasible or possible to replicate in a classroom. Riley expressed, “I really love them because they can take more abstract concepts, and they show you what they would be like on the screen.” Riley also used TED-Ed, as well as Khan Academy, to modify lessons to meet the needs of English Language Learners due to the option of subtitles to extend access. Several Gen Z teachers used Blooket, Kahoot, or Quizlet as review games for exams or to fill short amounts of time between transitions. Finally, Alex and Madison favored subject specific websites that offer short videos on narrow topics to help students relate to their own lives. Many of these subject specific websites offer lesson plans for teachers to use that incorporate the video, text, or images offered. Madison explained their use of these lesson plans as a “mental jog place. I will rarely just take their lesson plans verbatim,

or even 50% of them, but it's a useful thing to see what might interest students." Gen Z teachers maneuver through a web of TFWs from student management, to learning management, to district curriculum, to favorite websites which extend learning on a daily basis to the advantage of their students who receive more personalized learning experiences tailored to their needs using the data collected.

Social media also offers a plethora of resources for Gen Z teachers. Educators, in general, and especially Gen Z teachers use social media for professional opportunities to network, seek resources, and improve classroom practices among other things (Carpenter et al., 2020, Carpenter et al., 2023; Prestridge, 2019). When asked about whether or not they recognize a shift between their personal self and the professional self as they scrolled through social media and ran across something for school, most Gen Z teachers dismissed this as a matter of course. Devin, Taylor, Wynn, and Phoenix all said they just stop, jot a quick note and move on. If they are really interested, they might bookmark it. Wynn discussed pinning ideas in TikTok or Instagram as well as making a mental note. Phoenix revealed they have multiple pages of bookmarks on TikTok because two filled, and they needed more. Sage watched Instagram and Facebook Reels to see how other teachers suggest teaching complex topics in a classroom like theirs. Taylor took screenshots of ideas such as class décor, group activities, and templates for various occasions. The lives of Gen Z teachers intertwine at times with their social media so deeply, it may be difficult to separate the two realms as demonstrated by Alex who stated, "it's more than who I am as a person. It'd be really tough to divide my thoughts in to work thoughts and personal thoughts because I am almost always thinking about work." Further, if Lincoln scrolled across something that might work in their classroom, they "pause TikTok and jot down

ideas or go to Amazon to find supplies.” Madison enjoyed just seeing what others are doing and offering a resource that a colleague expressed needing for their classroom.

To meet the needs of a spectrum of students in the classroom, Gen Z teachers use AI in targeted ways to their advantage despite expressing skepticism about AI themselves. Gen Z teachers may use ChatGPT, but most use AI models designed for educator use (TeachShare, Google Gemini integrated into the Google Suite for educators, SchoolAI, MagicAI, or Diffit) in the classroom. The transition from current teaching pedagogy to AI influenced models and programs will require Gen Z teachers to keep up with new technology as they progress in their careers. According to Darling-Hammond (2025), “this transformation will demand a workforce with enhanced digital literacy, adaptability, and the ability to work alongside intelligent technologies” (para. 2). This working “alongside” the technology as districts and schools introduce it offers opportunities and challenges. Phoenix felt comfortable using AI to quickly produce a worksheet, look up information, or get ideas for behavior or learning accommodations. Alex stated they “really like using Diffit in a very controlled way. I like it because I will proof all of it...it does make great readings for the kids, and I can really home in on the specific reading level. It will really tailor it to precisely what I want it to look at.” Lincoln liked using ChatGPT to “give me engaging ways that I can introduce narrative writing to a group of students who are at varying levels”. Sage and Phoenix both used ChatGPT to write or edit emails. Phoenix said they used Chat GPT to make their emails “more professional, check my spelling, clean this up, especially with sensitive topics like student hygiene. ChatGPT has helped me, so I don’t be like, hey, your child stinks, we need to do something about it. It’s a nicer way.” None of the Gen Z teachers in this study used AI to the extent reported by Sparks (2026) who described a 5th grade teacher in Texas who “personalized her school’s AI writing tool to mimic her own teaching style,

questioning her students and encouraging them to be more reflective in their writing” (para. 7). Gen Z teachers exposed to AI find themselves learning about the capabilities, the limits, and wrestling with how they might use AI to their advantage but also teaching their students to use it responsibly.

Gen Z teachers live in a vortex of technology that changes often with AI at the forefront at the moment. Skepticism, despite using AI, prevailed among participants. Gallup reported that, among Gen Z in general, “56% say [AI] tools help them finish work faster, eight in 10 now admit that using AI in this way makes actually learning more difficult in the future” (Rose, 2026, para. 9). Kos’myna et al. (2025) discussed “cognitive debt” in their recent study of essay writing using three methods by participants. One method used only the brain, another allowed Google Searches, and the last used AI. Concerns in the study included the impact of cognitive debt which is the “repeated reliance on external systems like LLMs replaces the effortful cognitive processes required for independent thinking” (Kos’myna, 2025, p. 151). Riley reflected this perception expressing concerns about the long-term impact on student learning stating,

I see ChatGPT really, really limiting thinking and independent work. For those who have figured out how to work the system and how to work the tool, I think they can be off to the races. But for those who use it as a replacement for their own skills, that’s where it gets scary.

Taylor sees the future but hesitated to jump in all the way, expressing, “AI is a necessary evil I probably have to get used to. I’m holding off as long as I can. I try to keep my students out of it because you need to learn how to do something first.” As districts introduce more AI options for students and teachers, Gen Z teachers will need to go alongside that technology to learn about it and teach their students how to use it while also ensuring that learning is occurring.

Gen Z teachers use social media to communicate with families, advocate for their students, and share the positive accomplishments in their classrooms. Shaw (2020) explained the code-switching Gen Z performs with social media communications providing examples of phone calls to the closest circle with family and friends. Facebook for serious connections with extended family, professional organizations, and communities. Texting is used for informal group settings. Snapchat for quick, informal messages amongst an intimate group. Instagram for peer communication, gathering news, announcements, and sharing. Video services such as TikTok may be used to gather ideas, share expertise, or for entertainment. Gen Z teachers in this study exhibited these same preferences. Taylor teased the importance of an upcoming event with a series of Instagram posts to build suspense. Alex shouted out students for their performance in a tournament with their teacher Instagram account. Taylor used Snapchat to send quick directions to a small team of students with tasks over time. Phoenix encouraged the community to show up and support a bake sale benefitting their school on Facebook and then reposted the needs of a family who lost a home to gather community support. Devin administered a Facebook account for their activity which “parents utilize for a variety of things, both communication and to see pictures and things like that kind of an engagement sort of thing” to raise the profile of students and their accomplishments. Gen Z teachers use social media to their advantage to engage their community in their classrooms and schools, to celebrate accomplishments, and support activities for students and families. When reflecting on how they use TikTok, Facebook, and Instagram in their classroom, Wynn mused its “kind of interesting to see social media from an advocacy or business platform. That’s just how you connect, even parents use it as a source of information, and like seeing their kids recognized on it.” Gen Z teachers expect other entities to maintain an online presence as well. Citing the negativity they see online towards education,

Lincoln and Phoenix both made a concerted effort to post and repost positive things about their classroom, school and community on TikTok, Instagram, and Facebook.

Gen Z teachers use professional social media accounts, including messaging apps, to take precautions to limit their personal exposure online and protect their students. Devin, Alex, Riley, and Taylor all cited an invaluable use of messaging apps to organize teams, activities, and coordinate class projects through Snapchat, Remind, GroupMe, BAND, etc. The use of messaging apps gives an option for Gen Z teachers to not give out their personal cell phone numbers opening them to liabilities. Taylor said they were “pretty cagey about it.” when asked about giving out their phone number. Alex minced no words saying, “Oh God, I could never in a million years give out a phone number.” Gen Z teachers coach, sponsor, and travel with students which requires communication options beyond just posting instructions in Google Classroom or social media. Using messaging apps allows for Gen Z teachers to contact all parents or students at once, or a sub-group, or just individuals when necessary. These messaging apps leave a digital archive of conversations and protect Gen Z teachers when communicating with parents and students.

Gen Z teachers also protect their students when using social media professionally. Taylor only used last names and said “I don’t tag locations. I do have the name of my school in my bio but not the town we are located in.” They also suggested that a good filter is “not putting anything that the school wouldn’t already been likely to publish.” Wynn, Phoenix, and Madison checked to make sure students are not on the “no post” list provided by the school. Lincoln “always covers their [student] faces and never says their names or anything like that.” Taylor stated, “If I see someone random that I don’t know follows the [teacher Instagram] account that has nothing to do with my kids, then I’ll block them because I don’t want my kids to be blown

out on the internet”. Gen Z teachers use multiple precautions to ensure their students are safe on their social media accounts and in their online activity involving them.

The prevalence of AI in schools and modern life gave pause to most Gen Z teachers in this study. Skepticism of AI starts with the lack of a human touch to communications and production of outputs. This caution reflects polling data from the findings of Rose (2026) “as even as they [Gen Z] use these tools, vast swaths of young people are deeply acrimonious and even resentful of the AI-centric future that many feel is being forcing on them” (para. 1). Chandler found themselves an early adopter who dove into the possibilities and led colleagues into learning more about it. After the deep dive, they altered course and now no longer use AI stating, “I just don’t want to do anything blindly or mindlessly. I want to be principled, so it requires that I think deeply about the integration and the ethical concerns.” August expressed concern over how AI companies “taught” their models stating, “I believe a lot of it doesn’t have a good data set behind it...maybe wasn’t even collected in a morally acceptable way.” Other Gen Z teachers expressed alarm at the environmental impacts of using AI. Students also call into question the authenticity of teachers using AI while prohibiting student use. Madison addressed this double standard saying, “the kids sense fakeness.” On the district level, teachers sense fakeness as well when professional development covering AI lacks objectives, policy explanations, and vision of intent. Alex considered using AI as a crutch which challenged the value of their own credentials to educate students. Wynn echoed the concerns of many Gen Z teachers as they discussed recommendations for students and for staff produced by AI. They emphatically expressed that “if a student asks me for a recommendation, I’m going to sit down and do it, because to me, they’re worth that 15-20 minutes it takes to do that.” As time factored into the use of AI by Gen Z teachers, they saw the effort used in lieu of AI as an expression of

value, or lack thereof, for themselves and others. Chandler noted that AI may produce a perfect lesson on paper supported by standards and activities, yet

at the end of the day, no student wants to sit and have an AI voice read over a loudspeaker to them. They want a teacher to look them in the eye, care about who they are, and help them on their learning journey.

Riley concurred stating “Losing those personal skills through technology can be really troublesome.” Gen Z teachers attempt to navigate technological change to their advantage and that of their students yet keep the human aspects of the art of teaching alive and well as they team up to work to develop all aspects of students, not just the academic standards acquisition or checking a box for assignment completion.

Research Question 2

The second research question was: How do high achieving Generation Z teachers prefer administrators to use technology when they lead?

Technology is infused into every part of the life of a Gen Z teacher (Lynch, 2022; Seemiller & Grace, 2019a); therefore, they expect those who lead them to use technology when organizing their workplace, communicating with them, and evaluating their performance. Gen Z teachers want their administrators to trust them, yet also be available for questions and consultations at the ease of an app on their phone. This requires administrators to demonstrate digital literacy and competence with technology beyond what might be normal or comfortable for them.

Gen Z teachers look to technology to solve problems or make progress on tough, adaptive challenges in their classrooms. Gen Z teachers prefer their work environment to be organized by time, calendars, desktop appearance, online resource access, student management systems,

learning management systems, as well as communications and the use of discernment of when technology should be used and when it is not helpful. For example, Gen Z teachers preferred digital organization of their school day and calendars. The efficient use of online calendars by administrators eases tension in schools. Wynn demonstrated this as they described the strain of working with two different administrators. One failed to cross reference schedules and communicate about events, “we would send stuff to him, and it would not do any good”. The other “did a pretty good job of keeping everything organized, communicating issues or conflicts, or working on making schedules work”. Online calendars with universal access for teachers and staff allows for better flow of information.

Gen Z teachers preferred competency demonstrated by administrators in the choice of digital products ensuring the ease of use, ready access, and a preference for a product to multitask to limit the number of logins. Wynn, Sage, Lincoln, and Phoenix all commented on the tangle of resources and sites they are expected to use daily. Wynn spoke for many when they said they wished administrators really understood the time it takes to use all the websites and other products describing a school webpage with “15 different icons for them to select to go to things grading, discipline, requests for transportation or leave, scheduling facility requests, it’s actually kind of insane.” Many Gen Z teachers preferred, as did Wynn, that “everything could be on one platform – scheduling, communications, class information [grades] and student information, like the demographics and stuff, the behavioral, recording, grading all could be in one place.” Taylor described working with an administrator who is not savvy on all the technology used in their building which caused issues at times because “it is imperative, especially with technology we use in the classrooms now, and that kids have in their back

pockets.” Lack of competency may cause administrators to underestimate the seriousness of a discipline issue, or the time required for teachers to use various programs.

In regard to academic leadership, Gen Z teachers prefer their administrators to behave online as they do, scrolling through for entertainment while finding interesting options for school and then sending the discovery to the appropriate teacher by tagging them, screenshot, or link. Alex expressed optimism that their administrator would “take the reins and search for things teachers could trial, a new website or program with a few teachers because they thought it might be good, hopefully guiding us to some good resources would be fantastic.” Sending a Gen Z teacher a link to a resource, tagging them in a post, or “liking” their social media post signals a form of mentoring and support of their teaching.

Phones, cellphones, apps, desktop apps, email, and more allow for fast, quick communication in schools. Discreet digital communication within a teaching team and/or with an administrator may save time and relationships with students. Sage described a coded system in use at their school using the GroupMe app. To help find lost students, Sage messaged “Hey, search and rescue” and a name. The school had a card with all the coded messages. “Flip flop” indicated to an administrator a teacher needed them to cover their class so they might handle a student situation one-on-one outside of the classroom, so the teacher and administrator “flip flop” places. These types of systems run underneath verbal communications and email systems.

The best systems also cause complications. Sage went further to discuss the challenges of the dual communication system of GroupMe and email at their school. Administrators from the district and school used email to communicate as well as dedicated GroupMe accounts for various groups of teachers and staff. Teachers were expected to monitor both. Sage expressed

frustration because “I check my email more, and I’m not caught up in the GroupMe 99% of the time.” Too many apps or systems may confuse communications more than solve issues.

In an example of digital communication systems working well, Lincoln described a system where “our principal sends out a weekly email, and it goes through all the things that are going on in the building, highlights of the week for certified and classified staff.” This email contained all the surveys, administrative schedules, meeting times, locations, etc. so that all information was in one place, not in several emails buried in the stream. Their district sent out monthly updates of events and updates as well as reminders of building maintenance as breaks approach or seasons change. Gen Z teachers prefer digital communication to be organized and intentional rather than random emails sent for individual purposes to maintain awareness of the happenings in their buildings, as to not be overwhelmed by the volume.

The time needed to digitally track student progress, behavior, data, and teacher professional development disappears into software programs and slips out of sight as paper is discontinued. Gen Z teachers prefer administrators to recognize the time it takes to comply with tasks required to fill out online forms using one or more digital programs in the course of their day or reporting events/data as this time and effort often hides in the network.

Gen Z teachers prefer administrators to value their time, such as the time needed to learn to use software, prepare lessons, analyze data, and conduct assessments using TFWs purchased by schools and districts. Gen Z teachers prefer administrators respect the input teachers give in these situations as they are the ones who implement these programs in the classroom. Gen Z teachers prefer to contribute to conversations about digital curriculum and technology as their districts decide what to purchase and that input be considered in decision making.

Gen Z teachers prefer administrators to use discretion when communicating digitally and in decision making. For example, Gen Z teachers prefer direct communication, face-to-face when the news is negative or challenging. They consider the use of email and other communications apps a chance to dodge the backlash or response to unpopular decisions, especially in regards to personnel and staff issues. Madison described such a situation,

I feel like technology is somewhat of a shield for some people. For example, our superintendent loves to send out a newsletter every week telling us how much he values us, and one could see that as a positive thing. But one could also see that as a way for him not to actually talk to us.

Madison felt this communications method “encourages teacher resentment.” Gen Z teachers prefer ways to directly communicate on highly important, personal issues such as staffing, emergencies, tight budgets, etc. to ensure the human element in communications and decisions.

As Gen Z teachers reflect on observations, they prefer feedback that makes them better teachers. For example, Gen Z teachers expressed a preference for administrators to play the required game, then set technology aside to take in the whole classroom. Lincoln advised that just “being present in the classroom is a big one. Just coming in, not necessarily to observe or to fill out any type of form, but just to be present, have a relationship with teachers, have a relationship with students.” Alex gave praise to their current administrator who makes an effort to “just kind of watch, see what’s going on, and she’ll give feedback every once in a while...maybe try this, maybe not, it’s up to you. I think she does a really good job of balancing those two things.” Gen Z teachers prefer observations done from the stance of curiosity with the goal of building relationships, knowing the whole picture of a classroom, and improving the teacher’s professional practice.

Gen Z teachers prefer administrators who consider and evaluate their performance in the classroom individually rather than with static digital tools. Administrators who value the individual contribution of each teacher as the people they are, rather than trying to fit them into check boxes gain the appreciation of Gen Z teachers. Most districts use online, check box programs with a few options for comments. Digital evaluation systems provide for uniformity in data collection, and efficiency of administrative time. Madison commented that “they use online forms to fill out the evaluations, I guess that allows for speed.” Riley expressed the frustration of many Gen Z teachers that “they use this technology to check all these bubbles. I think it could be a tool, but we’ve landed in this place where we’re self-absorbed by the technology.” Additionally, Riley recognized that “the district administration has created a game that local administration has to keep up with” which held the building administrator accountable for walk-throughs as much as it collected data on teacher activity in the classroom. Devin noted the difficulty of observing district wide initiatives in every classroom, based on a set of check boxes. Some Gen Z teachers noticed the lack of significant teaching experience for some administrators which they surmised may cloud their observations. Devin expressed consternation with these administrators as most troublesome because they are

usually admin who only taught a few years before they went and got their certifications, who blindly adhere to this observational thing...if you walk in and see the middle of my lesson, don’t dock me for not having an exit ticket.

Gen Z teachers recognize the importance of teacher evaluations and the challenging role of administrators in them yet prefer acknowledgment of their unique contributions to their classroom and school.

Research Question 3

The third research question was: How do high achieving Generation Z teachers use technology to shape their knowledge of education policy?

Gen Z teachers find themselves surrounded by education policy created decades ago by the federal government, in the last state legislative session, or changed last Monday night at a school board meeting. Responsible for implementing policy, Gen Z teachers seek to understand and learn about education policy which impacts their students, their professional practice, and their personal lives as related to salary and benefits, relicensure, and professional advancement. Gen Z teachers use technology to learn about education policy as well as inquiries with veteran colleagues and administrators.

Gen Z teachers use technology to learn when they find a gap in their knowledge of most anything, including education policy. Use of social media #hashtags to do a micro search on a specific topic, following influencers who keep up to date on federal, state, or local policy, or seeking out websites with needed information all contribute to the education policy knowledge of Gen Z teachers. New with AI, Gen Z teachers may search for patterns of policy, comparisons by state or district, rising trends, or other aspects.

Discussion of education policy started with definitions of said policy by Gen Z teachers themselves. Some gave more technical definitions than others. Alex offered that education policy is “guidelines to help kids in the simplest terms, that we have as teachers or school districts in order to best help our students.” Phoenix added hesitantly, “rules in place to help education be an effective learning space?” Sage concluded it includes “things passed by the legislature that affect any educational organization.” Getting more into the legal side of things, Riley suggested “a set of laws and guidelines developed by districts and states to guide administrators and teachers

through the process of educating students on predetermined topics” with Wynn adding oversight of “funding, guidelines on what we are allowed to teach.” Each Gen Z teacher focused more on their students, the rules and guidelines surrounding their experience in the classroom and the people who teach them than the large macro issues of education policy. A few mentioned budget and funding from state legislatures, most did not get into the details of our federal system of government. With most education policy focused on the state level, the purview of federal government oversight includes special education, civil rights, student loans, grants for multiple areas of education improvement, and national data collection to monitor progress of students and schools. Gen Z teachers further understood the importance of their local school board but did not mention it in their definitions of education policy. Most Gen Z teachers expressed concern at their perceived lack of knowledge of education policy as highlighted by Riley, who summarized for the group, “I really probably should be a lot more knowledgeable about the education system and policies coming my way than I am.” As discussions progressed, Gen Z teachers revealed more knowledge than they admitted at the start about the policies which surround them, their students, and their classrooms, schools, and districts.

When curious, Gen Z teachers use websites and social media to enhance their knowledge of education policy. Everything from the websites of legacy media covering current events, to government run websites at the federal, state, and local levels, to social media profiles of influencers, media sources, public figures, think tanks, teacher unions, and university departments were followed to provide information. Madison chose their sources carefully from multiple online newspapers but followed local media for news about their school district. Devin also read broadly for news citing a need for less bias, “I gravitate towards AP News, Reuters, BBC, things like that. I don’t frequent MSN or Fox.” Sage sought mentors first but “might

dabble a little bit online. I don't have trust for that, but if I were going to, I'd want to look it up directly." Others concurred with Sage as summarized by Riley, that they "would start with Google looking at reliable sources, then go through reputable sources to try to find an objective opinion that just gives me the facts and allows me to interpret it as an individual." Gen Z teachers all mentioned the KSDE website as a trusted and go to place for education policy information when needed.

In regard to social media, some Gen Z teachers follow edu-influencers with the perception of the online news as negative overall. August lamented, "I got to the point where I kind of stopped following the education news, just because it was making me sad and feeling a little bit hopeless." Lincoln concurred that they want news on education but "it makes me sad there's a lot of negativity. I'm a very positive human, so I try to focus on the happy news, which sometimes there's not a lot of ." Taylor went a bit further, expressing "it's probably not a great thing that I don't know how these outside forces are impacting me, but you try to look stuff up, and then I get frustrated , so I stop." Gen Z teachers indicate no problems finding information online, whether it be websites or social media, but tend to be careful about how much negative information they absorb and where to they go to find that information.

Just-in-Time Learning

Gen Z learned to learn in different ways due to their exposure to social media and online technology from an early age (Seemiller & Grace, 2019a). JIT offers a conceptual framework to understand this difference in learning as Gen Z turns to technology as a first instinct when curious or in need of resources or information. This allows them to learn faster and learn exactly what they need to know, when they need to know it (Clope, 2022; Nichols, 2025). Yilmaz et al. (2021) suggested that external sources, such as set date professional learning days, "push"

learning towards people as opposed to learners “pulling” the exact resources or information needed on demand independently (p.2). JIT makes learning more efficient and accessible which increases employee performance with higher retention and is less expensive than stand-alone training (Cloke, 2022; Darad, 2026; ELM Learning, 2022; Northpass, 2022, Parmley, 2023). Drawbacks of JIT include a significant investment of time and money as well as varying motivational levels of those using a system provided by a company (Northpass, 2022; Parmley, 2023). These drawbacks do not affect Gen Z teachers due their use of social media and online resources, most of which are free monetarily but cost them in data shared. Two drawbacks of JIT effect Gen Z teachers. The first is the sheer number of options provided by an online search or social media #hashtag search. The other is the loss of experience in working through, researching, or deeply studying an issue, problem, or topic on which JIT may mask a shallow understanding of the why behind the actions of Gen Z teachers or the resources they use (Rebelo, 2026). Gen Z teachers use JIT to learn when and where they need information as they need it.

High achieving Gen Z teachers practice the art of Just-in-Time (JIT) learning using social media or the internet as there is no app or internally trained and dedicated learning management or information system that a company created for teachers. Yilmaz et al. (2021) suggest the way professionals learn is changing from in-person classes with stated objectives and in-person attendance to that of quick searches to find just what is needed at just the right time. Lincoln used social media to deliberately look ideas up but also scrolls across them in their spare time, they like TikTok because “It gives lots of ideas. I love to learn about all sorts of things,” and that it “connects my team of teachers and all of us use it with our admin in the building.” The learning done by Lincoln benefited themselves and others.

JIT answers the concerns of Ebbinghaus who discussed the loss of learning due to lack of relevance or use of the knowledge (Nichols, 2025; Roediger, 1985). Gen Z teachers spent significant time in college classes and pre-service classroom observations as well as student teaching prior to taking on the challenge of their own classroom. Often one hears a new teacher say with exasperation, “They didn’t teach me how to deal with _____ in college.” In truth, that may be true, but it may also have been covered in a course, but the information remained irrelevant and therefore was not used at the time, so they forgot it. It is not feasible to educate pre-service teachers with everything they need to know; therefore, Gen Z teachers need to know how to find what they need which fits into the JIT model. Chandler referenced this in their observations about new teachers following all sorts of edu-influencers in college and thinking they had it all figured out, but then “they step into the classroom the first time, and it’s like a brick hits them. I’m like, yeah, because you lived in a fairytale land during college, but now you have to live in real land.” If a new teacher knows how to learn and is supported in their use of JIT, with veteran experts around them to ensure quality, they quickly find their footing and gain confidence. Gen Z teachers may know more about how to teach because they spend far more time than previous generations watching other teachers teach online. They find and think about lessons online as the scroll to relax. Gen Z teachers show competent in the art of searching for what they need, sorting through the chafe, reflecting how lesson or resource might work in their classroom, then executing their newfound plan.

Using the “push” and “pull” model discussed by Yilmaz et al. (2021), Gen Z teachers are pushed learning expectations from their districts and schools in the form of district curriculums, district learning goals from school improvement plans, and building wide strategies. These resources and objectives provide the *box* Gen Z teachers engage with daily in the form of their

professional practice. Yet, when these district-provided resources are not enough and the need arises or time is tight, they “pull” resources from social media using a #hashtag or google a TFW to search for specific resources or skill building lessons or finding just the right reading excerpt, lesson, simulation, activity, or strategy they need for the next day or the next class.

Demonstrating their use of JIT, Phoenix stated, “anytime I have questions, I can go and put in a #hashtag, and I can look it up, it connects me with what I need.” Time is of the essence and Gen Z teachers need resources quickly, therefore they default to the comfort of technology. Using technology, Gen Z construct their knowledge from the options of social media, TFW, and AI models through their interactions online. This allows them to quickly find information, absorb it, modify it for their needs, and then experiment. There is one difference between closed corporate models and the vast online system of apps and websites Gen Z teachers choose from when learning. Corporations spend money and time to create and update their JIT models (Parmley, 2023). On the other hand, social media and the internet is updated by outside sources of various biases, motives, and levels of expertise. Carpenter, et al. (2023) expressed concern as to a lack of filters to ensure quality when teacher look online for resources. Gen Z teachers worked to evaluate and then reflect before using resources found online to teach (Cloke, 2022; Parmley, 2023). These evaluation and reflection processes, absent in other JIT models, increase the knowledge base of Gen Z teachers and enhance their skills in the classroom which multiplies the benefits of JIT (ELM Learning, 2022). Once Gen Z teachers query an issue, discern the relevancy of options offered on an app or website, then modify it for their students, teach it, assess, and reflect, the next time a similar situation arises, they have an experience and knowledge base to draw upon to meet the challenge.

School districts hire people to plan professional learning and spend significant resources to execute those plans. Darad (2026) discussed “pre-generated lessons about abstract potentialities” (para. 3) which describes the vast majority of professional learning *done to* teachers on those calendar days set aside for large group/grade level/content area learning. These days generally meet the objectives of a school improvement plan required by the state and check the boxes off as the year goes by using a calendar discussed in high level meetings with few or no teachers present. This system legitimately meets several needs and expectations from various stakeholders in education such as local school boards, state legislatures, and/or state school boards. These elected officials have legal authority and mandates from voters to fulfill. This does not mean these district sessions meet all the learning needs of teachers in general. District and school professional development addresses school improvement, teaching methods, and other necessary topics at a macro scale. However, this may not be what the Gen Z teacher needs at a micro level in their classroom to meet the needs of students. Therefore, JIT rises to the occasion providing inexpensive, fast, accessible ways for Gen Z and other teachers to learn as it increases retention and engagement (Cloke, 2022; Darad, 2026; ELM Learning, 2022; Northpass, 2022; Parmley, 2023). Gen Z teachers carefully evaluate resources using state standards, reputation of the influencer, or validity of the product in the case of AI produced materials as discussed by Lincoln. Just because the search and find part of the learning process was quick with JIT, the execution still takes time. Also, Gen Z teachers may scroll along and find something they might need in a week, a month, or next semester which is when several Gen Z teachers said they bookmark it for later, share the link, or jot a note.

As AI develops, the applications for JIT expand. Gen Z teachers currently express skepticism but Giraud (2025) suggests AI might “provide instant explanations, tailored feedback,

and even simulate scenarios, helping close knowledge gaps faster than traditional methods” (para. 12). Gen Z teachers already use AI if short of time with examples from Lincoln mentioning using AI to create narrative prompts, make up tests from Riley, tiered readings from Alex, and an alternative, analog assignment from August. Resources found or generated will be used when relevant, but the Gen Z teacher knows where it is when the need arises. Using JIT, Gen Z teachers solved a time sensitive need in their classrooms using technology as they needed the resource. JIT allows Gen Z teachers to plan for now and for later, the relevance and purpose of the search gives meaning to the learning done online.

Implications for Practice

The purpose of this study is to explore how high achieving Gen Z teachers use technology to shape their professional practice, how they prefer their administrators to use technology when they lead, and how technology shapes their knowledge of education policy. It is important to understand how intertwined technology is with Gen Z teacher’s professional practice and crucial to their success and that of their schools. By applying the conceptual framework of Just-In-Time Learning, this study offers insight and a practical understanding of how Gen Z teachers use of technology shapes their professional practice and their knowledge of education policy. This research further explored how Gen Z teachers prefer administrators to use technology when they lead.

This research demonstrates that Gen Z teachers are using technology in amazing and positive ways. Educational leaders and fellow educators need to recognize that Gen Z teachers on their phone just might be searching for ways to understand. They may be searching for ideas about their next unit to teach or how to find the root of the behavior issue in 3rd Hour. They may be brushing up on content knowledge to help them tell great stories to their 6th graders. They

might have a crazy idea for a field trip to supplement their class but lack funding so they may be looking for fund raising ideas. The creativity of Gen Z teachers comes from their curiosity. That curiosity is fueled by the variety of examples they see on social media or a favorite website which then gives them great anecdotes or videos. Administrators need to consider the curiosity of Gen Z teachers as they use their phones as an ally in the lessons they prepare and the influence they have on students. The content of professional learning may not rank higher in the need to learn than the lesson plan that has them flummoxed. They may be learning professionally using JIT on social media, the internet, or AI but not considered “present” in the discussion of the room.

Veteran teachers may find great value in asking what they are doing on their phone rather than dismissing it as playing games. Gen Z teachers in this study expressed sincere, deep regard and admiration for their veteran colleagues and expressed a willingness to share their ideas. One said of a colleague a couple decades older than them, with wonder in their voice, “_____ teacher does not need Google, they are Google.” Another participant moved schools to have an opportunity to teach with more veteran teachers. With much passion and purpose to offer their schools, Gen Z teachers see the advantages of all that veteran experience and seek their mentorship. However, Gen Z teachers use technology as JIT to catch up to gain all that wisdom, content knowledge, or discernment of veteran teachers. If veteran teachers surf along with Gen Z teachers as they learn with JIT, some valuable partnerships may blossom and plant some new ideas as the two groups participate together in discussions of policy, funding, curriculum, etc. Gen Z teachers will do their best to show up on par with more experienced colleagues because they searched for information on the agenda before the meeting, those sites are bookmarked on social media and open on their phone. So, if Gen Z teachers are on their phones, they may be

paying closer attention than perceived because JIT learning may be happening as well. Gen Z teachers just need leaders and veteran colleagues to be curious, engage them in conversations, and listen to what they are saying. Those messages that may sometimes come in an electronic form as a text or a tag on social media, not necessarily in a pre-planned meeting.

Leaders in education today need to embrace Gen Z teacher's technological skills and knowledge of technology. Teachers and administrators of all generations can learn from each other. There is a steep uphill battle with technology as it changes quickly, mutates, and challenges school policy. By the time policy is enacted, students figure out how to work around it. Gen Z teachers expect education administrators to respect their experience and sometimes ask for advice on policy concerning how to deal with technology issues. With their immersive experience with technology and online, Gen Z teachers may catch trends early and work to figure out how to deal with them in their own classrooms. Administrators may consider including Gen Z teachers in deliberations concerning new issues with technology. Gen Z teachers build online networks of colleagues and influencers they trust which may give them advanced notice of trends concurrently with students.

Gen Z teachers discussed AI with skepticism. They expressed disappointment when detecting the use of AI to write emails, teacher evaluation comments, etc. Due to the overall negative reaction to the use of AI, the credibility of the message or the messenger may suffer when Gen Z teachers detect AI. Several participants interpreted the use of AI as a lack of value or respect for the recipient. Education administrators should consider this as they contemplate using AI voices for school videos, the reading of graduation names, creating comments for teacher evaluations, sending an AI generated email, or sending home AI generated newsletters. Frustration stemmed from a lack of clear expectations and policies in regards to use of AI.

Participants noted that credibility increased with disclosure. It is important to note that Gen Z teachers use AI, and their skepticism may seem contradictory. This contradiction may come from dissonance due to the impression that AI is inevitable, despite their skepticism. Therefore, if the Gen Z teacher themselves and/or their students fail to learn how to use AI, they may be left behind.

Gen Z teachers appreciate the time it takes for an administrator or veteran teacher to acknowledge and encourage them. Gen Z teachers appreciate those who compassionately work to mentor them, offer sincere conversations (even if they are short), and push them to be better teachers and people. Time is something Gen Z teachers keep sacred as they try to balance their work at school and their personal lives. This means that the explicit use of time in the form of a quick handwritten note, a pause during a walk-through to really see what is going on in the classroom, or a “like” and/or “share” of content they posted about their team, activity, or classroom project goes a long way to strengthening a relationship with them.

In regard to communication, Gen Z teachers far prefer good news and bad news be delivered in person, not email. The time saving effort of the “All Staff” email saves many a meeting and Gen Z appreciates that as well as any other teacher. The “Reply All” option used by colleagues to comment in return is a source of irritation and comedy. Education administrators may consider creating some protocols for themselves and sharing those with staff in regard to the uses of technology. For example, staff updates containing these types of information will be sent using this technology every week, therefore Gen Z teachers and all others know where to find that type of information while other information will always be in person. Finally, a source of frustration for Gen Z teachers in this study was the perceived “hiding behind email” so an administrator escapes the reactions or questions that inevitably follow. It is considered cowardly

by the participants in this research who respect the time and uncomfortable nature of such situations and the leadership necessary to show up in person.

Education policy builds over time. Veteran teachers tell the tales of cycles of initiatives, methods, and school improvement plans. With this experience and perspective not available to Gen Z teachers, they may feel as if they are drinking out of a fire hose at teacher orientation and some professional development sessions. Administrators and veteran teachers may want to consider what they know, how they know it, and how their bias may affect a Gen Z teacher. Sage told a story of going to an off-site professional learning opportunity and went back to their school fired up and excited. They shared with their veteran colleagues who immediately dismissed their learning as something they did 10 years ago, and it will pass. Their enthusiasm waned quickly. Gen Z teachers seek to learn in various ways, many times online with social media or TFWs and then determine if a method or resource might work for them without the baggage of past years of initiatives or mandates. Gen Z teachers may try old things new to them, yet they seek the guidance of veteran teachers for background with “why” important to their understanding.

A couple of participants noticed their administrators shielding them from educational policy while another referred to it as “blast doors” between them and policy which open only when needed. All participants thought the practice of only discussing education policy as necessary was okay, but they also wanted to know more of the why and where the policy came from seeking authenticity and candor. If Gen Z teachers are expected to implement policy, tell them the backstory of why, give clear expectations and consequences, and then be consistent in the follow up of that policy. If Gen Z teachers are invited to assist in making policy such as choosing textbooks, purchasing technology, etc., respect the advice they give as they thought

about, researched it, and gave their time. If a decision goes against their advice, explaining why is important to Gen Z teachers.

Recommendations for Future Research

Further research in the areas of the generational cohort of Gen Z teachers, high achieving Kansas Horizon Award winners or the equivalent in other states, the use of technology when administrators lead, and the use of technology to shape knowledge of education policy offer opportunities for a deeper understanding of the technological currents running through schools influencing Gen Z teachers and their students. This section explores these recommended opportunities for further research on these topics.

Interactions of Teachers with District Purchased Technology and other Resources

Interviews with several Gen Z teachers in this study revealed significant amounts of time spent on district purchased curriculum which generate data for elementary teachers in particular, to use to form math or reading groups, assign interventions for math or reading, offer students choices of books by reading level, and so much more. Just how much time teachers spend interacting with this technology vs. time interacting with students directly may prove to be an interesting study.

At the secondary level, in particular, teachers separate out into content areas. School districts spend millions of dollars on textbooks and curriculum apps or websites. These district resources result from hundreds of hours of staff time to pilot, review, and finally select these curriculum resources. A study considering the choice points as Gen Z teachers decide when not to use these district-purchased resources, instead opting for TFWs such as TPT or a content related websites may be another interesting study. Measuring the sheer volume of TPT lessons purchased and used by Gen Z teachers may be an interesting addition to this second study.

The impact of the choices teachers make around outside curriculum, why those choices are made, which teachers make them, and the impact those outside sources have on teachers and students in the classroom would give insight into the total influence of outside sources on lesson plans and content related curriculum. For example, a considerable number of special interest groups create easy to access, easy to use online content and lessons for teachers, offer reduced cost or free destination professional development, and use social media to share these ideas as well. These special interest groups generally have a political or philosophical agenda behind their work. This is the type of influence that might be interesting to explore considering the number of special interest groups offering teachers resources outside those purchased by their district.

Impact of AI in the Classroom based on the Style of Release of the AI Model

Most Gen Z teachers in this research embraced and explored AI tools. Districts open up AI LLMs for teachers and students to use with mixed levels of notice, education, or policy. Some districts quietly just allow the apps to appear on the search engine windows or on Google Classroom pages with no announcement, no education, no expectations or policy. Other districts sent out emails announcing the release of an AI model to staff and parents with a multi-page newsletter about the AI model the district chose, why the choice of that particular model, policy surrounding expectations for teachers and students, and information to educate staff and parents about the LLM. The initial integration of AI will not be the last of large releases of technology into the education field. An exploration of the influence of each of the release methods described to discover the experience of all stakeholders and the efficacy of teacher use and/or student use of AI and the influence this may or may not have on discipline areas such as academic dishonesty, etc. might be interesting and model best practices for later releases.

Experiences of Teachers Who Achieve Notable Success in the First Two Years

A qualitative study of experience of high achieving Gen Z teachers in their first couple of years may reveal helpful data about mentoring, pre-service education, and readiness to teach, and/or habits and behaviors of high achieving teachers which may prove different than their peers not recognized by their district or principal for excellence. The data from such a study may offer insights for pre-service programs in higher education, school districts for mentoring programs, and education leaders looking to lead these new teachers through the trials and highlights of the start of their career.

Conclusion

The purpose of this study was to examine how high achieving Gen Z teachers use technology in their professional practice, how they prefer their administrators to use technology when they lead, and how technology shapes their knowledge of education policy. The significance of studying of Kansas Horizon Award winning Gen Z teachers offered insights into the skills and capacity of teachers recognized for excellence so early in their careers. The use of Just-In-Time learning as a conceptual framework revealed the connections between technology and the success of these teachers. The ubiquitous use of technology by Gen Z teachers led them to expect others to exhibit the same behaviors, competence, and problem-solving savvy as themselves. In another dimension, the use of technology by Gen Z teachers also came with intentional protections for themselves and their students. Professional accounts and a systematic use of guardrails to protect student privacy as well prevention of bad actors infiltrating their accounts highlighted cautious behaviors while Gen Z teachers used social media.

All participants used teacher focused websites which included those provided by their school district such as grade level curriculum, tiered supports, learning management systems,

and district personnel websites. When Gen Z teachers recognized a need for additional or deeper resources, they turned to outside sources and social media to ensure every student in their classroom learned the intended concepts. Gen Z teachers went beyond their district provided resources for simulations, videos, lesson plans, and more. Use of social media, in particular, varied from no use to following a group of carefully curated edu-influencers to find ideas for methods or content resources. AI use ranged from no use to full acceptance and reliance on it for daily enhancements to professional practice. All participants, whether they used AI or not, expressed skepticism as to the influence on themselves and their students

Through Just-In-Time learning, high achieving Gen Z teachers reached for technology when needed using it as an accelerating force to achieve the results they desired in their classroom. The availability of technology, 24 hours a day, seven days a week gave Gen Z teachers the support when and where they needed it to meet their professional obligations. Balancing technology from paper and pencil to high-tech interactive video boards and AI in their classrooms, the competence of Gen Z teachers with technology led them to expect the same from others, especially the administrators who led them. This expected competence included knowing how to efficiently use technology in communications, evaluations, and the organizational capacity of calendars, learning management systems, curriculum, student behavior management and more. In relation to evaluations, Gen Z teachers appreciated when administrators went beyond the technology of their tablets and paused to observe the magic of the learning going on in their classrooms.

Observations of how Gen Z teachers are different from those in previous generations abound. In line with one of their generational cohort characteristics, Gen Z teachers reluctantly work the hours that teachers were, and still are, expected to donate to their schools above and

beyond their contract. Technology allows them to work more efficiently to offset some of these expectations. One participant noted after attending the KEEN conference that a commonality among their fellow Kansas Horizon Award winners of all grade levels and geographic regions was their work ethic and hours spent outside school. This observation, offered with frustration, noted some peer teachers may have the same capacity, yet their lives and personal responsibility may prevent them from performing at the same level due to time. The incentive system of teacher recognition deeply rooted in the tradition of the expectation of long hours and deep dedication to their classroom and school challenges the desire of Gen Z teachers to balance their work and personal lives.

Confident that if they do not know something, they may quickly find it highlights the use of Just-In-Time learning. Different than the corporate world's use of JIT with deeply researched and prepared closed systems for product and knowledge support, Gen Z teachers find themselves with an endless stream of options to learn from and resources to use on the internet. In this case, technology may be a disadvantage. Teachers used to only take home the ungraded papers and planning resources that fit in their school bag. Now, teachers have laptops, mobile phones, and tablets to access their work 24 hours a day, seven days a week. Emails at all hours, text messages, messages to and from apps, social media posts to update others or consume for their own benefit all contribute the extra hours beyond the planning, executing, and assessing of lesson plans completed during contract time. Gen Z teachers currently resist and work to cut the hours needed to meet professional obligations using technology as reported in this study.

Stakeholders in education, administrators, school boards, preservice programs, policy makers, communities, and teachers themselves, need to consider the generational shift which brings different expectations as more Gen Z teachers enter the classroom and veterans retire. Gen

Z as a cohort shows mobility in the workforce to seek the career and work desired to meet their need for balance in their lives as well as a determination to make a difference. The work options available to Gen Z teachers as they observe the contrast between their own work and lives, and that of friends and peers online is significant. The field of education offers Gen Z a chance to meet their need to make a difference in their world. Yet, Gen Z teachers see other options that may not require the sacrifice paid by previous generations of teachers in time and money. The marketplace of careers offers enticing alternatives where they may take their passion, skills, and determination to impact the world elsewhere. The skill set and technological savvy of Gen Z teachers sets them up to be willing and capable change agents to redesign and change the education system. Participants indicated a desire to stay and to make a difference. Gen Z teachers have the ideas, work ethic, grit, and determination to make change if the system includes them in the deliberations and gives them a chance to influence the future of education.

References

- Ahmed, S. K., Mohammed, R. A., Nashwan, A. J., Ibrahim, R. H., Abdalla, A. Q., Ameen, B. M. M., & Khedhir, R. M. (2025, April 14). Using thematic analysis in qualitative research. *Journal of Medicine, Surgery, and Public Health*, 6, 1-6.
<http://doi.org/10.1016/j.glmedi.2025.100198>
- Aichner, T., Grünfelder, M., Maurer, O., & Jegeni, D. (2021). Twenty-five years of social media: A review of social media applications and definitions from 1994 to 2019. *Cyberpsychology, Behavior, and Social Networking*, 24(4), 215-222.
<http://doi.org/10.1089/cyber.2020.0134>
- American Psychological Association. (2025). *Social media and the internet*. APA.
<https://www.apa.org/topics/social-media-internet>
- Anderson, M. & Jiang, J. (2018, May 31). *Teens, social media and technology 2018*. Pew Research Center. <https://www.pewresearch.org/internet/2018/05/31/teens-social-media-technology-2018/>
- Ballotpedia. (2024). *Presidential candidates, 2024*.
https://ballotpedia.org/Presidential_candidates,_2024
- Baraniuk, C. (2024, January 23). *The apple macintosh was first released 40 years ago: These people are still using the ageing computers*. BBC.
<https://www.bbc.com/future/article/20240123-the-apple-macintosh-was-first-released-40-years-ago-these-people-are-still-using-the-aging-computers>
- Berger, C. (2023, June 8). Meet the typical Fortune 500 CEO: A total Gen Xer. Basically Keanu Reeves. *Fortune*.
<https://fortune.com/2023/06/08/how-old-fortune-500-ceo-gen-x-keanu-reeves-musk/>
- Bhattacharya, K. (2017). *Fundamentals of qualitative research: A practical guide*. Routledge/Taylor & Francis Group.
- Bluesky. (n.d.) *Welcome to the social internet*. Retrieved December 7, 2024, from
<https://bsky.social/about>
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <http://doi.org/10.1191/1478088706qp063oa>
- Carpenter, J. P. & Harvey, S. (2019). “There’s no referee on social media”: Challenges in educator professional social media use. *Teaching and Teacher Education*, 86, 102904.
<http://doi.org/10.1016/j.tate.2019.102904>

- Carpenter, J. P. & Krutka, D. G. (2014). How and why educators use Twitter: A survey of the field. *Journal of Research on Technology in Education*, 46(4), 414-434.
<https://doi.org/10.1080/15391523.2014.925701>
- Carpenter, J. P., Krutka, D. G., Trust, T. (2022). Continuity and change in educators' professional learning networks. *Journal of Educational Change*, 23, 85-113.
<https://doi.org/10.1007/s10833-020-09411-1>
- Carpenter, J. P. & Morrison, S. A. (2018). Enhancing teacher education...with Twitter. *Phi Delta Kappan*, 100(1), p.25-28.
https://kappanonline.org/enhancing-teacher-education-with-twitter/#google_vignette
- Carpenter, J. P., Morrison, S. A., Craft, M. Lee, M. (2020). How and why are educators using Instagram? *Teaching and Teacher Education*, 96, 1-14.
<https://doi.org/10.1016/j.tate.2020.103149>
- Carpenter, J. P., Shelton, C. C., Schroeder, S. E. (2023). The education influencer: A new player in the educator professional landscape. *Journal of Research on Technology in Education*, 55(5), 749-764. <https://doi.org/10.1080/15391523.2022.2030267>
- Cennamo, D.G. & Gardner, D. (2008, November 7) Generational differences in work values, outcomes and person-organisation values fit. *Journal of Managerial Psychology*, 23(8), 891-906. <http://doi.org/10.1108/02683940810904385>
- Chand, S. T. (2025, June 27). *A message to early career educators: You're not replaceable. And what's more, you're powerful.* LinkedIn. <https://www.linkedin.com/pulse/why-gen-z-teachers-future-education-ai-sunanna-tara-chand-np4xc/>
- Chardonens, S. (2025, January 24). Adapting educational practices for Generation Z: Integrating metacognitive strategies and artificial intelligence. *Frontiers in Education*.
<https://doi.org/10.3389/educ.2025.1504726>
- Chenowith, E. & Pressman, J. (2017, February 7). *This is what we learned by counting the women's marches.* The Washington Post.
<https://www.washingtonpost.com/news/monkey-cage/wp/2017/02/07/this-is-what-we-learned-by-counting-the-womens-marches/>
- Christensen, C. M. (2006). The ongoing process of building a theory of disruption. *Journal of Product Innovation Management*, 23(1), pp. 39 – 55. <http://www.doi.org/10.1111/j.1540-5885.2005.00180.x>
- Chuen, C. Y. (2024). *How to lead Generation Z in the workplace.* ACESENCE Agile Leadership Blog. <https://blog.acesence.com/how-to-lead-generation-z-in-the-workplace/#:~:text=Leading%20Generation%20Z%20in%20the,in%20today's%20evolving%20business%20landscape.&text=Explore%20our%20executive%20coaching%20programs,adaptive%2C%20and%20future%2Dresilient.>

- Cloke, H. (2022, March 29). *Just-in-time learning: 8 steps to success*. Growth Engineering. <https://www.growthengineering.co.uk/what-is-just-in-time-learning/>
- Cole, S. & Kavlakoglu, E. (n.d.). What is artificial intelligence (AI)? IBM. Retrieved May 23, 2026, from <https://www.ibm.com/think/topics/artificial-intelligence>
- Conte, Niccolo. (2026, January 2). Charted: U.S. Population by Generation. *Visual Capitalist*. <https://www.visualcapitalist.com/charted-u-s-population-by-generation/>
- Cotter, K. (2019). Playing the visibility game: How digital influencers and algorithms negotiate influence on Instagram. *New Media & Society*, 21(4), 895–913. <https://doi.org/10.1177/1461444818815684>
- Creswell, J. & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage.
- Crotty, M. (2015). *The foundation of social research: Meaning and perspective in the research process*. Sage. <https://doi.org/10.4324/9781003115700>
- Darad, K. (2026, Feb 1). *Just-in-time learning and enablement: Designing learning for real-world performance*. eLearning Industry. <https://elearningindustry.com/just-in-time-learning-and-enablement-designing-learning-for-real-world-performance>
- Darling-Hammond, L. (2007, May 2). *Evaluating ‘No Child Left Behind’: The problems and promises of Bush’s education policy*. The Nation. <https://www.thenation.com/article/archive/evaluating-no-child-left-behind/>
- Darling-Hammond, L. (2025, May 30). *Educating in the AI era: The Urgent need to redesign Schools*. Forbes. <https://www.forbes.com/sites/lindadarlinghammond/2025/05/30/educating-in-the-ai-era-the-urgent-need-to-redesign-schools/>
- Day, C., Kington, A., Stobart, G., & Sammons, P. (2006). The personal and professional selves of teachers: Stable and unstable identities. *British Educational Research Journal*, 32(4), 601–616. <https://doi.org/10.1080/01411920600775316>
- DeMaria, K., Page, I., Reuss, K. & Zemper, Z. (2024, August). *Changes in U.S. labor supply*. U.S. Department of Labor Employment and Training Administration. https://www.dol.gov/sites/dolgov/files/ETA/opder/DASP/Trendlines/posts/2024_08/Trendlines_August_2024.html
- deMarrais, K. & Lapan, S. (2104). *Foundations for research: Methods of inquiry in education and the social sciences*. Routledge.

- Department of Chemistry. (2023, January 11). *History*. Kansas State University.
https://www.k-state.edu/chem/about/welcome_message/history/#:~:text=The%20Department%20of%20Chemistry%20is,feature%20of%20the%20new%20College.
- Department of Homeland Security v. Regents of the University of California, 591 US (2020).
<https://www.oyez.org/cases/2019/18-587>
- Dimock, M. (2023, May 23). *5 things to keep in mind when you hear about Gen Z, Millennials, Boomers, and other generations*. Pew Research Center.
<https://www.pewresearch.org/short-reads/2023/05/22/5-things-to-keep-in-mind-when-you-hear-about-gen-z-millennials-boomers-and-other-generations/>
- DISA. (2024, December 4). DISA Global Solutions, Inc. *Wondering what the law is in your state?* <https://disa.com/marijuana-legality-by-state>
- District of Columbia v. Heller. 554 US 570 (2008). <https://www.oyez.org/cases/2007/07-290>
- Dobbs, State Health Officer of the Mississippi Department of Health, et al. v. Jackson Women's Health Organization et al. 597 U.S. (2022).
https://www.supremecourt.gov/opinions/21pdf/19-1392_6j37.pdf
- D'Souza, K. (2025, March 24). *Five years after Covid shuttered schools, parent empowerment lives on*. EdSource. <https://edsource.org/2025/five-years-after-covid-shuttered-schools-parent-empowerment-lives-on/728262>
- Dunlap, R. E., & Jacques, P. J. (2013). Climate change denial books and conservative think tanks: Exploring the connection. *American Behavioral Scientist*, 57, 699-731.
<http://doi.org/10.1177/0002764213477096>
- Elliott, R. & Timulak, L. (2021). *Descriptive-interpretive qualitative research*. American Psychological Association. <https://doi.org/10.1037/0000224-001>
- ELM Learning. (2022, April 21). *What is just-in-time training? And how to implement it*.
<https://elmllearning.com/blog/just-in-time-training/>
- Faculty Office, Faculty of Education and Health Sciences. (n.d.). *Professional Practice and Education*. University of Limerick, Limerick, Ireland.
<https://www.ul.ie/ehs/research-ehs/ehs-research-themes/professional-practice-and-education>
- Fellay, M. (2024, June 10). *Just-in-time learning: The future of workplace training*. Spekit.
<https://www.spekit.com/blog/just-in-time-learning>

- Flippin, C. S. (2017). *Generation Z in the workplace: Helping the newest generation in the workforce build successful working relationships and career paths*. Candace Steele Flippin.
- Forbes Coaches Council. (2022, August 24). *How to appeal to Gen-Z without obviously 'marketing to Gen-Z'*. Forbes. <https://www.forbes.com/councils/forbescoachescouncil/2022/08/24/how-to-appeal-to-gen-z-without-obviously-marketing-to-gen-z/>
- Fullan, M. (2016). *The new meaning of educational change* (6th Edition). Routledge; Taylor Francis Group. <http://www.doi.org/10.1007/978-3-319-24916-6>
- Fuller, J. & Kerr, W. (2022, March 23). *The Great Resignation didn't start with the pandemic*. Harvard Business Review. <https://hbr.org/2022/03/the-great-resignation-didnt-start-with-the-pandemic>
- Future Caucus. (2024). *Meet Gen Z legislators*. <https://futurecaucus.org/gen-z-legislators/>
- Gagne, Y. (2024, November 22). *'Speech should be open to all': Bluesky COO Rose Wang on the platform's radical vision for social media*. FastCompany. <https://www.fastcompany.com/91233939/bluesky-rose-wang-radical-vision-social-media-twitter-alternative>
- Gartner. (2020, August 19). *Gartner HR research finds employees are only applying 54% of newly learned skills* [Press Release]. <https://www.gartner.com/en/newsroom/press-releases/2020-08-19-gartner-hr-research-finds-employees-are-only-applying-54-percent-of-newly-learned-skills>
- George W. Bush White House Archives. (n.d.-a). *Fact sheet: No Child Left Behind has raised expectations and improved results*. The Bush Record. Retrieved July 21, 2024, from <https://georgewbush-whitehouse.archives.gov/infocus/bushrecord/factsheets/No-Child-Left-Behind.html>
- Giraud, V. (2025, October 29). *Continuous growth to on-demand mastery*. Medium. <https://medium.com/@vincentgiraud/just-in-time-learning-from-continuous-growth-to-on-demand-mastery-81e5390e4c8f>
- Greenhaigh, S. P., Rosenberg, J. M., Russell, A. (2021, March 19). The influence of policy and context on teachers' social media use. *British Journal of Educational Technology*, 52, 2020 – 2037. <https://doi.org/10.1111/bjet.13096>
- Haidt, J. (2024). *The anxious generation: How the great rewriting of childhood is causing an epidemic of mental illness*. Penguin Press. <https://doi.org/10.1177/10776990241268990>
- Hanna, K. T. & Lutkevich, B. (2025, January 23). *What is social media?* TechTarget Network. <https://www.techtarget.com/whatis/definition/social-media>

- Health Resources and Services Administration. (2023, December). *Opioid Crisis*. HRSA. <https://www.hrsa.gov/opioids>
- Heineke, A. J., Ryan, A. M., & Tocci, C. (2015). Teaching, learning, and leading: Preparing teachers as education policy actors. *Journal of Teacher Education*, 66(4), 382 -294. <https://doi.org/10.1177/0022487115592031>
- Hernandez-de-Menendez, M., Diaz, C. & Morales-Menendez, R. (2020). Educational experiences with Generation Z. *International Journal on Interactive Design and Manufacturing*, 14, 847-859. <https://doi.org/10.1007/s12008-020-00674-9>
- Hong, J., Day, C., & Greene, B. (2018). The construction of early career teachers' identities: Coping or managing? *Teacher Development*, 22(2), 249–266. <https://doi.org/10.1080/13664530.2017.1403367>
- Huls, A. (2022, January 31). *The evolution of technology in k-12 classrooms: 1659 to today*. EdTech. <https://edtechmagazine.com/k12/article/2022/01/evolution-technology-k-12-classrooms-1659-today-perfcon>
- Huynh, L. (2024, September). *The decline of the teaching profession*. U.S. Bureau of Labor Statistics -Monthly Labor Review. <https://www.bls.gov/opub/mlr/2024/beyond-bls/the-decline-of-the-teaching-profession.htm>
- Kansas Department of Education. (2020). *Continuous learning task force guidance*. KSDE. <https://eric.ed.gov/?id=ED611889>
- Kansas Department of Education. (2024a). *About us*. KSDE <https://www.ksde.org/Home/Quick-Links/About-Us>
- Kansas Department of Education. (2024, October 30b). *Blue ribbon task force on student screen time passes numerous recommendations before final report*. [Press Release]. KSDE. <https://www.ksde.org/Home/Quick-Links/News-Room/ArtMID/3386/ArticleID/3822/Blue-Ribbon-Task-Force-on-Student-Screen-Time-passes-numerous-recommendations-before-final-report>
- Kansas Department of Education. (2024c). *Fiscal and administrative services*. KSDE. <https://www.ksde.org/Agency/Fiscal-and-Administrative-Services>
- Kansas Department of Education. (2024d). *Kansas State Board of Education*. KSDE. <https://www.ksde.org/Board>
- Kansas Department of Education. (2024e). *Learning services*. KSDE. <https://www.ksde.org/Agency/Division-of-Learning-Services>

- Kansas Department of Education. (2024f). *Kansas Horizon Award Program*. KSDE. <https://www.ksde.gov/licensure/educator-awards/kansas-horizon-award-program>
- Kansas Geological Survey. (2002, January). *Townships and sections*. https://www.kgs.ku.edu/Publications/pic20/pic20_2.html
- Katz, R., Ogilvie, S., Shaw, J., Woodhead, L. (2021). *Gen Z, explained: The art of living in a digital age*. The University of Chicago Press. <http://doi.org/10.7208/chicago/9780226814988.001.0001>
- Kennedy, B., Yam, E., Kikuchi, E., Pula, I., & Fuentes, J. (2025, September 17). *How Americans view AI and its impact on people and society*. Pew Research Center. https://www.pewresearch.org/science/2025/09/17/how-americans-view-ai-and-its-impact-on-people-and-society/?gad_source=1&gad_campaignid=23853897313&gbraid=0AAAAA-ddO9FhjpK72bgItp4Abf9P9hZaN&gclid=Cj0KCQjwoMXQBhDcARIsAH-eEtu9GS5JGR815rdbuxfwA4MXO_3eF7QE6jliADsUSbktXtT7p82J7NkaAm5XEALw_wcB
- Klein, A. (2021, September 14). *Pandemic parents are more engaged. How can schools keep it going?* EducationWeek. <https://www.edweek.org/leadership/pandemic-parents-are-more-engaged-how-can-schools-keep-it-going/2021/09>
- Kober, N. (2020). *History and evolution of public education in the US*. Center on Education Policy. <https://files.eric.ed.gov/fulltext/ED606970.pdf>
- Koehler, M., Shelton, C., Carpenter, J., & Greenhalgh, S. (2020, October). Where does all the money go? Free and paid transactions on TeachersPayTeachers.com. *Teachers College Record*. <https://www.tcrecord.org/Content.asp?ContentId=23478>
- Korhonen, V. (2024). *Population distribution in the United States in 2023, by generation*. Statista. <https://www.statista.com/statistics/296974/us-population-share-by-generation/>
- Korhonen, V. (2025, May 13). *Population distribution in the United States in 2024, by generation*. Statista. <https://www.statista.com/statistics/296974/us-population-share-by-generation/>
- Kos'myna, N., Hauptmann, E., Yuan, Y. T., Situ, J., Liao, X., Beresnitzkey, A. V., Braunstein, I., & Maes, P. (2025, December 31). Your brain on ChatGPT: Accumulation of cognitive debt when using an AI assistant for essay writing task. *Arxiv*. Advance online publication. <https://doi.org/10.48550/arXiv.2506.08872>
- Kostere, S. & Kostere, K. (2022). *The generic qualitative approach to a dissertation in the social sciences: A step by step guide*. Routledge. <https://doi.org/10.4324/9781003195689-2>

- Kretchmar, J. (2019). *Sociological theory: Social constructionism*. EBSCO.
<https://www.ebsco.com/research-starters/religion-and-philosophy/sociological-theory-social-constructionism>
- K.S.A. § 72-2281. (1981). https://www.ksrevisor.gov/statutes/chapters/ch72/072_022_0081.html
- K.S.A. § 72-1072. (1968). https://www.ksrevisor.gov/statutes/chapters/ch72/072_010_0072.html
- Kupperschmidt B.R. (2000, September). Multigeneration employees: Strategies for effective management. *The Health Care Manager*, 19(1), 65-76.
<https://doi.org/10.1097/00126450-200019010-00011>
- Lindle, J. C. (Ed.). (2014). *Political contexts of educational leadership*. Routledge; University Council for Education Administration. <https://doi.org/10.4324/9780203549766>
- Lenihan, R. (2026, April 28). *History of IBM: Company timeline, milestones & facts*. The Street.
<https://www.thestreet.com/technology/history-of-ibm-company-timeline-milestones-facts>
- Lynch, J. (2022). *Annual Educator Confidence Report* (8th Annual). HMH.
<https://www.hmhco.com/documents/2022-educator-confidence-report-ecr>
- Lynch, J. (2025). *Annual Educator Confidence Report* (11th Annual). HMH.
<https://www.hmhco.com/documents/educator-confidence-report-2025>
- Macià, M. & García, I. (2016). Informal online communities and networks as a source of teacher professional development: A review. *Teaching and Teacher Education*, 55, 291-307.
<http://doi.org/10.1016/j.tate.2016.01/021>
- Mahmoud, A., Fuxman, L., Mohr, I., Reisel, W., & Grigoriou, N. (2021). “We aren’t your reincarnation!” workplace motivation across X, Y, and Z generations. *International Journal of Manpower*, 42(1), 193-209. <http://doi.org/10.1108/IJM-09-2019-0048>
- Mahoney, J. (2024, February 18). *Embracing technology in the classroom: A Gen Z educator’s perspective*. Medium. <https://medium.com/@j.mahoney1124/embracing-technology-in-the-classroom-a-gen-z-educators-perspective-a3c491327c6e>
- Malin, J. R., & Lubienski, C. (2015). Educational expertise, advocacy, and media influence. *Education Policy Analysis Archives*, 23(6). <http://doi.org/10.14507/epaa.v23.1706>
- Mallik, A. (2021, June). Education policy: A brief note. *Prime Scholars Library*, 9(3), p. 2.
<https://www.primescholarslibrary.org/articles/education-policy-a-brief-note-72270.html>
- Mann, K. (2023, June 5). *Guiding the next generation: Understanding and leading Gen-Z*. Forbes.
<https://www.forbes.com/councils/forbescoachescouncil/2023/06/05/guiding-the-next-generation-understanding-and-leading-gen-z/>

- Mannheim, K. (1952). The problem of generations. In P. Kecskemeti (Ed.), *Essays on the sociology of knowledge: Collected works*: (Vol. 5, pp. 276-322; 22-24 (introduction)). Routledge. (Original work published in 1927/1928)
- Marotzki, W., Holze, J., & Verständig, D. (2014). Analysing Virtual Data. In U. Flick (Ed.), *The Sage Handbook of Qualitative Data Analysis* (450 – 463). Sage.
<https://doi.org/10.4135/9781446282243>
- McConnell. (n.d.). *Senate Republican Leader Mitch McConnell U.S. Senator for Kentucky*.
<https://www.mcconnell.senate.gov/public/index.cfm/biography>
- McDonald et al. v. City of Chicago, Illinois, et al., 561 U.S. 742 (2010).
<https://www.oyez.org/cases/2009/08-1521>
- Merriam, S. B. & Tisdell, E. J. (2016) *Qualitative research: A guide to design and implementation*. (4th ed.) Jossey-Bass.
- Merriam-Webster.com (n.d. - a). Social media. In *Merriam-Webster.com dictionary*. Retrieved June 17, 2025, from <https://www.merriam-webster.com/dictionary/social%20media>
- Merriam-Webster.com (n.d. - b) Technology. In *Merriam-Webster.com dictionary*. Retrieved May 23, 2026, from <https://www.merriam-webster.com/dictionary/technology>
- Mertens, M. (2022, May 19). *50 years of Title IX: How one law changed women's sports forever*. Sports Illustrated.
<https://www.si.com/college/2022/05/19/title-ix-50th-anniversary-womens-sports-impact-daily-cover>
- Miller, T. (2024). *Kansas Horizon Award Program*. Kansas Department of Education.
<https://www.ksde.org/Agency/Fiscal-and-Administrative-Services/Communications-and-Recognition-Programs/Kansas-Horizon-Award-Program>
- Milojevic, N. & Pavlovic, T. (2025, October 14). *The Gen Z effect and the workforce evolution: 2025 statistics*. CAKE.com blog. <https://cake.com/blog/gen-z-workforce-statistics/>
- Moran, S. & Walsh, G. (2026). *Audiences to watch: Gen Z*. GWI.
<https://www.gwi.com/reports/gen-z/explore?submissionGuid=52027364-b390-4369-8a61-05c12961a218#chapter-2>
- Mostafa, F. (2021). Social media: A flexible collaborative learning space for teacher professional learning to integrate education for sustainability in schools. *Journal of Open, Flexible, and Distance Learning*, 25(1), 32-44. <https://doi.org/10.61468/jofdl.v25i1.443>
- National Archives. (2022, May 10a). *Morrill Act (1862)*.
<https://www.archives.gov/milestone-documents/morrill-act>

- National Archives. (2022, May 10b). *Northwest Ordinance (1787)*.
<https://www.archives.gov/milestone-documents/northwest-ordinance#:~:text=The%20Northwest%20Ordinance%20chartered%20a,rights%20guaranteed%20in%20the%20territory>.
- National Center for Education Statistics. (2026). *Characteristics of public school teachers*. The Institute of Education Statistics. <https://nces.ed.gov/programs/coe/indicator/clr/public-school-teachers>
- National Federation of Independent Business v. Kathleen Sebelius, Secretary of Health and Human Services, et al., 567 U.S. 519 (2012).
<https://supreme.justia.com/cases/federal/us/567/519/>
- National School Boards Association. (2023). *About school board and local governance*.
<https://www.nsba.org/about/about-school-board-and-local-governance>
- Nichols, R. (2025, December 2025). *Just-in-time training: How to implement it in 2026*. 360Learning. <https://360learning.com/blog/just-in-time-training/>
- Noble, S. & Schewe, C. (2003). Cohort segmentation: An exploration of its validity. *Journal of Business Research*, 56(12), 979-987. [https://doi.org/10.1016/S0148-2963\(02\)00268-0](https://doi.org/10.1016/S0148-2963(02)00268-0)
- No Child Left Behind Act of 2001, Pub. L. No. 107-110, 115 Stat. 1425 (2002).
<https://www.govinfo.gov/content/pkg/PLAW-107publ110/pdf/PLAW-107publ110.pdf>
- Northpass. (2022). *What's just in time learning? Definition, strategies & more*. Gainsight Customer Education. <https://www.northpass.com/just-in-time-training-definition>
- Obergefell v. Hodges, 576 U.S. 644 (2015). <https://www.oyez.org/cases/2014/14-556>
- O'Malley, E. & Cebula, A. (2015). *Your leadership edge: Lead anytime, anywhere*. KLC Press.
- Papasoltiriou, S. (2025). *Leading Generation Z: A practical guide for HR and line managers*. Engage Employee. <https://www.engageemployee.com/blog/leading-generation-z-a-practical-guide-for-hr-and-line-managers#:~:text=UNDERSTANDING%20GENERATION%20Z:%20A%20PSYCHOLOGICAL,inside%20and%20outside%20the%20office>
- Papasoltiriou, S.(2026). *Gen Z's Workplace imperative: Psychological safety in the workplace*. Engage Employee. <https://www.engageemployee.com/blog/gen-zs-workplace-imperative-psychological-safety-in-the-workplace>
- Parmley, L. (2023, May 6). *What is just-in-time learning? A complete guide to the benefits & overall process*. Course Method. <https://coursemethod.com/just-in-time-training.html>

- Pelosi. (2024). *Congresswoman Nancy Pelosi California's 11th District*.
<https://pelosi.house.gov/>
- Peshkin, A. (1988). In search of subjectivity — One's own. *Educational Researcher*, 17(7), 17-21. <https://doi.org/10.2307/1174381>
- Peterson, B. (2023, June 16). *What Gen Z wants in the workplace: Companies adapt to a new generation of employees*. The Washington Post.
<https://www.washingtonpost.com/business/2023/06/16/gen-z-employment/>
- Philogene, A. (2025, October 31). Gen Z teachers are ready to reinvent education. Schools need to catch up. *The 74*. <https://www.the74million.org/article/gen-z-teachers-are-ready-to-reinvent-education-schools-need-to-catch-up/>
- Prestridge, S. (2019). Categorising teachers' use of social media for their professional learning: A self-generating professional learning paradigm. *Computers & Education*, 129, 143-158. <https://doi.org/10.1016/j.compedu.2018.11.003>
- Privitera, G. & Ahlgrim-Delzell, L. (2019). *Research methods for education*. Sage.
- Quirkos. (2026). <https://www.quirkos.com/>
- Railey, H. (2017, December 19). *Who makes ed policy in your state?* Education Commission of the States. <https://www.ecs.org/who-makes-ed-policy-in-your-state/>
- Ray, S. (2023, July 23). *Threads now fastest-growing app in history – with 100 million users in just five days*. Forbes.
<https://www.forbes.com/sites/siladityaray/2023/07/10/with-100-million-users-in-five-days-threads-is-the-fastest-growing-app-in-history/>
- Ready, D., Salazar, J., & Vernoon, C. (2024, March-a). *Discretionary spending in fiscal year 2023*. Congressional Budget Office.
<https://www.cbo.gov/system/files/2024-03/59729-Discretionary-Spending.pdf>
- Ready, D., Salazar, J., & Vernoon, C. (2024, March-b). *Mandatory spending in fiscal year 2023*. Congressional Budget Office. <https://www.cbo.gov/system/files/2024-03/59728-Mandatory-Spending.pdf>
- Ready, D., Salazar, J., & Vernoon, C. (2024, March-c). *The federal budget in fiscal year 2023*. Congressional Budget Office. <https://www.cbo.gov/system/files/2024-03/59727-Federal-Budget.pdf>
- Rebelo, M. (2026, February 16). *What is just-in-time learning?* Zapier.
<https://zapier.com/blog/just-in-time-learning/>

- Reckhow, S., Tompkins-Stange, M., Galey-Horn, S. (2021, April). How the political economy of knowledge production shapes education policy: The case of teacher evaluation in federal policy discourse. *Educational Evaluation and Policy Analysis*, 43(3), 472-494. <https://doi.org/10.3102/01623737211003906>
- Rodesiler, L. (2017). Local social media policies governing teachers' professionally oriented participation online: A content analysis. *Tech Trends – Association for Educational Communications & Technology*, 61, 293-300. <https://doi.org/10.1007/s11528-016-0139-z>
- Rodrigues, K. (2024, January 8). *Schools after COVID: 6 ways for districts to better engage parents amid concerns about COVID learning loss*. The74. <https://www.the74million.org/article/schools-after-covid-6-ways-for-districts-to-better-engage-parents-amid-concerns-about-covid-learning-loss/>
- Roediger III, H.L. (1985). Remembering Ebbinghaus [Review of the book *Memory: A contribution to experimental psychology*]. *Contemporary Psychology: A Journal of Reviews*, 30(7), 519-523. <http://doi.org/10.1037/023895>
- Rose, J. (2026, April 30). *The more young people use AI, the more they hate it*. The Verge. <https://www.theverge.com/ai-artificial-intelligence/920401/gen-z-ai>
- Rudolph, C.W., Rauvola, R.S., Costanza, D.P., & Zacher, H. (2021). Generations and generational differences: Debunking myths in organizational science and practice and paving new paths forward. *Journal of Business Psychology*, 36, 945–967. <https://doi.org/10.1007/s10869-020-09715-2>
- Ruiz, M. (2022, November 11). *Maxwell Alejandro Frost, Gen Z's first congressman, is living his abuela's 'wildest dream'*. Vogue. <https://www.vogue.com/article/maxwell-alejandro-frost-gen-z-congressman-elect-interview>
- Saldaña, J. (2021). *The coding manual for qualitative researchers*. Sage.
- Schaeffer, K. (2023, February 7). *The changing face of Congress in 8 charts*. Pew Research Center. <https://www.pewresearch.org/short-reads/2023/02/07/the-changing-face-of-congress/>
- Schaeffer, K. (2024, September 24). *Key facts about public school teachers in the U.S*. Pew Research Center. <https://www.pewresearch.org/short-reads/2024/09/24/key-facts-about-public-school-teachers-in-the-u-s/>
- Schwarz, H. (2024, November 19). *The website tracks how fast Bluesky is growing in near real time*. FastCompany. <https://www.fastcompany.com/91230935/the-website-tracks-how-fast-bluesky-is-growing-in-near-real-time>

- Seemiller, C. & Grace, M. (2016). *Generation Z goes to college*. Jossey-Bass
- Seemiller, C. & Grace, M. (2019a). *Generation Z: A century in the making*. Routledge: Taylor and Francis Group
- Seemiller, C. & Grace, M. (2019b). *Generation Z learns: A guide for engaging Generation Z students in meaningful learning*. Self-published.
- Seemiller, C. & Grace, M. (2024). *Gen Z around the world: Understanding the global cohort culture of Generation Z*. Emerald Publishing
- Shaheen, M., Sudeepta, P. & Ranajee. (2019). Sampling in qualitative research. *Advances in Business information systems and analytics*, 2, 25-51. <http://doi.org/10.4018/978-1-5225-5366-3.ch002>
- Shaw, H. (2020). *Sticking points*. Tyndale.
- Shelton, C., Schroeder, S., & Curcio, R. (2020) Instagramming their hearts out: What do edu-influencers share on Instagram? *Contemporary Issues in Technology and Teacher Education*, 20(3), 529-554.
- Shelton, C., Schroeder, S., & Curcio, R. (2024). The teacher-to-teacher online marketplace of ideas: A new future in curriculum? In V. Benson (Ed.) *Handbook of social media in education, consumer behavior and politics* (Vol. 1., pp. 21-42). Elsevier Inc. <https://doi.org/10.1016/B987-0-443-29108-1.00002-X>
- Smith, T., Booker, L. N., Pierce, S., & Boren, M. (2023, October). Recruiting the next generation of teachers: Challenges and innovations. *Southern Regional Education Board*. <https://www.sreb.org/publication/recruiting-next-generation-teachers-challenges-and-innovations>
- Sparks, S. D. (2026, March 4). *Gen Z teachers grew up with tech. Now they're seeking better boundaries for students*. EdWeek. <https://www.edweek.org/the-state-of-teaching/2026/teaching-learning/gen-z-teachers-grew-up-with-tech-now-theyre-seeking-better-boundaries-for-students#:~:text=Gen%20Z%20teachers%20are%20the,as%20platforms%20rose%20and%20fell.>
- State Library of Kansas. (2013a). *Article 6: Education*. <https://kslib.info/832/Article-6-Education>
- State Library of Kansas. (2013b). *Ordinance and Preamble*. <https://kslib.info/825/Ordinance-and-Preamble>
- Stillman, D. & Stillman, J. (2017). *Gen Z at work: How the next generation is transforming the workplace*. Harper Business.

- Strauss, W. & Howe, N. (1991). *Generations: The history of America's future*. Morrow.
- Stryker, C. & Kavlakoglu, E. (n.d.). *What is artificial intelligence?* IBM.
<https://www.ibm.com/think/topics/artificial-intelligence>
- Supreme Court of the United States. (n.d.) *Current members*.
<https://www.supremecourt.gov/about/biographies.aspx>
- Szymkowiak, A., Melović, B., Dabić, M., Jeganathan, K., & Kundi, G. S. (2021). Information technology and Gen Z: The role of teachers, the internet, and technology in the education of young people. *Technology in Society*, 65, 1 - 10.
<https://doi.org/10.1016/j.techsoc.2021.101565>
- Teachers Institute. (2023, November 22). *Understanding education policy: Its definition and importance*. <https://teachers.institute/operational-dimensions-education/educational-policy-definition-importance/>
- Terrell, S. (2023). *Writing a proposal for your dissertation: Guidelines and examples*. Guilford.
- The Office of Hillary Rodham Clinton. (2025). About Hillary.
<https://www.hillaryclinton.com/about/>
- Tidhar, A. (2021). Generation Z: Characteristics and challenges to entering the world of work. *Cross Cultural Management Journal*, 13(1), 107-115.
- Tracy, S. J. & Hinrichs, M. M. (2017, August 1). Big tent criteria for qualitative quality. In J. Matthes, C.S. Davis & R.F. Potter (Eds.) *The International Encyclopedia of Communication Research Methods*. John Wiley & Sons,
<https://doi.org/10.1002/9781118901731.iecrm0016>
- Treem, J. W., Dailey, S. L., Pierce, C. S., & Biffl, D. (2016, September 4). What we are talking about when we talk about social media: A framework for study. *Sociology Compass*.
<https://doi.org/10.1111/soc4.12404>
- Tseng, V. (2012). The uses of research in policy and practice. *Social Policy Report*, 26(2), 1-16.
<https://files.eric.ed.gov/fulltext/ED536954.pdf>
- Twenge, J. (2023). *Generations: The real differences between Gen Z, Millennials, Gen X, Boomers, and Silents — and what they mean for America's future*. Atria.
- Twenge, J. M. & Campbell, W. K. (2010). Birth cohort differences in the monitoring the future dataset and elsewhere: Further evidence for Generation Me – commentary on Trzensniewski & Donnellan (2010). *Perspectives on Psychological Science*, 5(1), 81-88.
<https://www.doi.org/10.1177/1745691609357015>

- USA Facts Team. (2024, April 10). *Who is Gen Z? Key insights in 4 charts*. USA Facts.
<https://usafacts.org/articles/who-is-gen-z/>
- USA Facts Team. (2025, June 2). *Who are the nation's teachers? Key insights in five charts*. USA Facts. <https://usafacts.org/articles/who-are-the-nations-teachers/>
- U. S. Department of Education. (2024a). *Fiscal year 2025 budget summary*.
<https://www2.ed.gov/about/overview/budget/budget25/summary/25summary.pdf>
- U. S. Department of Education. (2024, May 23 - b). *The federal role in education*.
<https://www2.ed.gov/about/overview/fed/role.html>
- U.S. Department of Education. (2024, September 11 - c). *What is the every student succeeds act?* Office of Elementary and Secondary Education.
<https://www.ed.gov/laws-and-policy/laws-preschool-grade-12-education/esea/what-is-the-every-student-succeeds-act>
- Warnick, B. R., Bitters, T. A., Falk, T. M., & Kim, S. H. (2014). Social media and teacher ethics. *Educational Policy*, 30(5), 771-795. <https://doi.org/10.1177/08905904814552895>
- Weiss, C. H. (1995). The four "I's" of school reform: How interests, ideology, information, and institution affect teachers and principals. *Harvard Educational Review*, 65, 571-593.
<https://doi.org/10.17763/haer.65.4.05530845t676w50h>
- White House. (n.d.). *Kamala Harris*. Retrieved July 21, 2024, from
<https://www.whitehouse.gov/administration/vice-president-harris/>
- White House Historical Association. (2024). *Joseph R. Biden, Jr.*
<https://www.whitehousehistory.org/bios/joseph-r-biden-jr>
- Wichita Public Schools. (2020, March 3). *Guidelines for the use of social media by employees*. USD 259.
[https://www.usd259.org/about-wps/board-of-education/boe-policies/boe-policy-details/~board/7-boe-policies/post/p1230a-guidelines-for-the-use-of-social-media-by-employees#:~:text=Regardless%20of%20whether%20you%20post,\(HIPPA\)%2C%20or%20other%20relevant](https://www.usd259.org/about-wps/board-of-education/boe-policies/boe-policy-details/~board/7-boe-policies/post/p1230a-guidelines-for-the-use-of-social-media-by-employees#:~:text=Regardless%20of%20whether%20you%20post,(HIPPA)%2C%20or%20other%20relevant)
- Wiedmer, T. (2015). Generations do differ: Best practices in leading Traditionalists, Boomers, and Generations X, Y, and Z. *Delta Kappa Gamma Bulletin*, 82(1), 51-58.
- Williamson, B. & Hogan, A. (2020, July). Commercialisation and privatisation in/of education in the context of COVID-19. *Education International Research*.
<https://www.ei-ie.org/en/item/25251:commercialisation-and-privatisation-inof-education-in-the-context-of-covid-19>

- Yadav, R. & Chaudhari, S. (2024, March 22). Do leadership behavior preferences differ among generations? A qualitative study of Gen X, Y, and Z in India. *Asian Business & Management*, 23, (337-365). <https://doi.org/10.1057/s41291-024-00266-5>
- Yeban, J. (2024, May 14). *The roles of federal and state governments in education*. FindLaw. <https://www.findlaw.com/education/curriculum-standards-school-funding/the-roles-of-federal-and-state-governments-in-education.html>
- Yilmaz, Y., Papanagnou, D., Fornari, A., & Chan, T.M. (2022, January 4). The learning loop: Conceptualizing just-in-time faculty development. *Society for Academic Emergency Medicine: AEM Education and Training Journal*. <https://doi.org/10.1002/aet2.10722>

Appendix A - Solicitation Email

High achieving Generation Z teachers use of technology to shape their professional practice and knowledge of education policy. This research further explored how Gen Z teachers prefer administrators to use technology when they lead.

I would like to invite you to share your experience and use of social media and/or online websites to shape your teaching, preferences for leadership from education administrators, and to learn about educational policy. Your experience is important and critical to this research study. The process of my research design requires two interviews. The first one, we will discuss the impact of social media and online websites on your professional practice in terms of pedagogy. In the second interview we will discuss your preferences for leadership from education administrators and education policy. In both interviews, we will discuss the ways social media shapes your understanding of each aspect of your professional practice.

These interviews will be conducted online or in person. Regardless of location, the interviews will be recorded using a voice recorder and a video conferencing app with the data stored according to the agreement in the Informed Consent Form sent to you prior to the interviews. Written consent must be provided by you, the participant, and state that you voluntarily took part in the interviews.

To participate in this research, you must:

1. meet the definition of the Generation Z cohort as set by Seemiller and Grace (2019) – born between 1995 and 2010.
2. be an active teacher in a Kansas public school defined as the teacher of record in the classroom per the Kansas Department of Education (KSDE).
3. must be recognized as a Kansas Horizon Award winning teacher having been through the process of selection outlined by KSDE.
4. must be active on social media as a part of their behavior as a teacher

Interviews will take place during scheduled contact sessions as agreed upon by both you and me. These interviews will be conducted without interruption as your time is valuable. Each interview will be conducted at a separate time for a total of two.

After completion of the interview, I will transcribe the interviews. After the first interview, I will send the transcription to you for verification that the transcribed data is indeed what you said. The same process will occur after the second interview.

At any time, before, after, or during this study, you have the right to withdraw from further participation with no explanation or repercussions. Any data collected will be deleted from the research. After the completion of this research study, you will have the opportunity to inquire about the results and findings.

To volunteer, please just reply to this email as soon as possible. I would love the opportunity to learn more, and I would really appreciate your participation in this research for my dissertation study.

If you have any questions, you can contact me or my major professor Dr. Royce Ann Collins, racollin@ksu.edu.

Thank you for your time and I hope to hear from you soon. Please reply to this email if you are interested in participating or learning more.

Kara Belew
Doctoral Student
Educational Leadership
Kansas State University

Appendix B - ¶Informed Consent Form

High achieving Generation Z teachers use of technology to shape their professional practice and knowledge of education policy. This research further explored how Gen Z teachers prefer administrators to use technology when they lead.

Project Approval Date: July 14, 2025

Length of Study: 8 months

Principal Investigator: Dr. Royce Ann Collins, Professor

Co-Investigator: Kara E. Belew, doctoral student

Contact Details for Problems/Questions:

Dr. Royce Ann Collins 913-961-4255 racollin@k-state.edu

IRB Chair Contact Information:

Lisa Rubin, Chair, Committee on Research Involving Human Subjects, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, (785) 532-3224, rubin@ksu.edu

Brad Woods, Associate Vice President for Research Compliance, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, (785) 532-3224, comply@ksu.edu

Purpose of Research:

The purpose of this research study is to explore the impact of social media on the professional practice of Generation Z teachers. Specifically, to investigate how Generation Z teachers inform their pedagogy and their knowledge of educational policy using social media.

Procedures or Methods to be Used:

You will be asked to participate in two 60-to-90-minute interviews to discuss your use of social media to inform your educational professional practice. You will also be asked some background information concerning your use of social media use. You will be asked to share any social media posts or sites that you use to gather information to inform your classroom pedagogy or educational policy knowledge. A screenshot will be captured of the sites you share. You will also be asked to share any social media posts you shared with the intend to improve the profession.

Risks or Discomforts Anticipated:

There are no known risks for this research study. You have the right to withdraw from the study at any time. Any data that has been collected will be deleted.

Benefits Anticipated:

Participants may benefit from exploring the social media tools they use to inform their professional practice and reflecting on how they find credible sources.

Extent of Confidentiality:

To ensure your privacy, you will be assigned pseudonym which will be used on all data collected. The video portion of the interview will be deleted after the conclusion of the interview after analysis of social media posted shared are recorded as screen shots and only the audio recording will be retained. The doctoral student will transcribe the interviews. All data (audio recording, transcriptions, information checklist, and pictures of social media sites) will be stored on the doctoral student's password protected personal computer. This computer is kept in a personal locked office. All data collected will be kept for three years after the completion of the study. After this time, the data will be deleted from all devices and electronic storage files will be destroyed.

Terms of Participation:

I understand this project is research, and that my participation is voluntary. I also understand that if I decide to participate in this study, I may withdraw my consent at any time, and stop participating at any time without explanation, penalty, or loss of benefits, or academic standing to which I may otherwise be entitled.

I verify that my signature below indicates that I have read and understand this consent form, and willingly agree to participate in this study under the terms described, and that my signature acknowledges that I have received a signed and dated copy of this consent form.

Participant Name

Participant Signature

Date

Appendix C - ¶Interview Protocol

Questions for the First Interview

Questions in our first interview will cover three major topics concerning how you use technology in your classroom – social media, teacher focused websites, and artificial intelligence (AI). The first portion will cover social media, the second teacher focused websites, and the final part of the first interview will finish with AI.

Warm up Question: What impact has the Kansas Horizon Award had on you as a professional and/or your classroom experience?

SOCIAL MEDIA

- How do you define social media?
- How would you describe your use of social media?
 - Reflect on your use of social media in a personal sense vs. a professional sense.
 - Do you consider yourself more a consumer of social media or a producer?
 - Does this change between your personal or professional use?
 - What benefits or challenges do you perceive in your use of social media as a professional?
- How much time do you spend on social media in a professional capacity?
 - Do you feel it is worth it? Why?
- Do you distinguish a difference between your work at school and scrolling through and exploring education related posts at home on your own time?
- What role(s) does social media play in your continuing development as a professional teacher?
 - Lesson planning?
 - Networking?

- Seeking professional learning opportunities?
 - Other?
- In your Information Checklist, you indicated you use _____ app(s). If you do not mind, can you show me how your use one or more of those apps and what you find useful about the information you gain off that app?
 - Would you mind screen shotting those apps, sites, or interactions and sending/showing them to me so can screenshot them?
 - Can you show me or send an example(s) of how you have used it/them?
- How do you evaluate how you can trust information, ideas, etc. you obtain from posts on apps or social media influencers?
- What policies does your school district have concerning social media that impact you as a teacher?
- In your Information Checklist Sheet, you indicated _____ can you tell me more about _____?

TEACHER FOCUSED WEBSITES

- How would you describe your use of academic and teacher focused websites?
- How much time do you estimate you spend on teacher focused websites at school not including those required for use by your district?
 - Is that online time worth it?
- How do you determine if the information found on a teacher focused website would be “good” to use in class? What criteria do you use to determine whether or not to use something you find online?

Works for me as a teacher or I have the skills to implement the lesson, etc.	Academically valid? Grade level appropriate	Reading level appropriate	Interactive and engaging for students
Do students talk to each other	Do students have opportunities to respond	Writing Speaking	Listening Reading
Meets district/state standards	Reputation of person who posted info or reviews by others	Good accommodation for a 504 or IEP	Previous experience with the person's work
Other	Other	Other	Other

- What expectations or policies does your school district have concerning using teacher focused websites for planning and instruction?
- In your Information Checklist, you indicated you use _____ teacher focused websites. If you do not mind, can you show me how your use one or more of those websites and what you find useful about the information you gain off them?
 - Would you mind screen shotting those websites and sending/showing them to me so can screenshot them?
 - Can you show or send me an example(s) of how you have used them?
- In your information checklist sheet, you indicated _____ can you tell me more about _____?

ARTIFICIAL INTELLIGENCE (AI)

- How would you describe your use of artificial intelligence (AI) programs?
- If you use AI, what programs do you use?
- What are the differences between using a search engine such as Google or Safari and using AI?
- How much time do you spend on AI?

- When might you consider turning to AI in your work as a teacher rather than another source of information?
- How do you determine if the information provided by AI would be “good” to use in class? What is criteria do you use to determine whether or not to use something you asked AI to generate?

Works for me as a teacher or I have the skills to implement the lesson, etc.	Academically valid? Grade level appropriate	Reading level appropriate	Interactive and engaging for students
Do students talk to each other	Do students have opportunities to respond	Writing Speaking	Listening Reading
Meets district/state standards	Good accommodation for a 504 or IEP	Check citations for validity	Generate multiple inquiries and compare
Try out the lesson before I use it	Compare to lesson I already use	Other	Other

- In your Information Checklist, you indicated you use _____ to inquire with AI. If you do not mind, can you show me how your use one or more of those inquiries and what you find useful about the information you gained?
 - Would you mind screen shotting those the inquiry and/or interactions with AI and sending/showing them to me so can screenshot them?
 - Can you show or send me an example(s) of how you have used AI as a teacher?
- What do you think the potential impact of AI will be on your work as a teacher in the future?
- What policies does your school district have about your use of AI as a teacher?
- How does time impact your decision to use technology as a teacher?
- Is there anything else you would like to share concerning the topics we discussed?

Questions for the Second Interview

- What conditions need to be in place at your school for you to achieve your top performance in the classroom?
- In a perfect world, in what ways would an education administrator (school or district) lead you as a teacher to achieve your potential as an educator?
 - What challenges can you describe in working with your school or district education administration?
 - What are some specific issues, logistics, policies, etc. that you find impact your job as a teacher or your professional practice?
- What role does technology play in the leadership of a school or school district?
- What type of involvement do you expect to have in decisions that affect you as an educator?
- Can you describe any leadership decisions that impacted your decision to stay in the classroom or teaching profession?
- Can you describe any potential leadership decisions you see impacting your decision to stay in the classroom or teaching profession?

EDUCATION POLICY

The purpose of this portion of the interview is to gain insight into your understanding of education policy and its impact on you as a teacher and your school or district.

- How do you define education policy?
- How do you see the government involved in public education in general?
- How do you see the government involved in your job as a teacher?

- What do you know about how government and education policy impacts your job as a teacher?
- Could you give an example of the level of government (local, state, or federal) you think most affects public education and/or your job as a teacher?
- What trend do you see in education policy influencing your career over the next five years?
- When you recognize a gap in your knowledge or need some information about education policy, where do you go for information?
- Have you done anything to influence education policy before you started teaching or since you became a teacher?
- How important do you think it is to vote?
- How do you perceive teacher unions to be in influencing education policy?
- What is the biggest gap in education policy being ignored today?
- How much did your pre-service or college preparation inform you about education policy?
- In our first interview, I found _____ interesting. Would you mind telling me more?

Appendix D - Information Checklist

1. Pseudonym Name of your choice: _____
2. What year were you born? _____
3. What is your current position at your school?
 _____ Special Education Teacher
 _____ General Education Teacher
 Subject(s) taught _____
 Grade level(s) taught: _____
 Addition role, please indicate: _____
4. How many years have you been in your current position? _____
5. How many total years have you been in public education? _____
6. How would you describe the school district in which you work?
 _____ Rural
 _____ Urban
 _____ Suburban
7. Please indicate your education level:
 _____ Bachelor's degree - no additional hours
 _____ Some graduate credits - no movement on salary schedule
 _____ Some graduate credits - movement on salary schedule
 _____ Master's degree - no additional hours
 _____ Master's degree - additional hours
 _____ Doctoral degree
8. What social media apps do you use or have downloaded (Check all that apply.)

_____ Facebook	_____ Instagram	_____ TikTok	_____ X
_____ Pinterest	_____ Reddit	_____ LinkedIn	_____ Quora
_____ Discord	_____ Threads	_____ BlueSky	_____ Remind
_____ Truth Social	_____ Slack	_____ Vimeo	_____ WeChat
_____ Messenger	_____ Telegram	_____ Viber	_____ Douyin
_____ Baidu	_____ Qzone	_____ Sina Weibo	_____ Kuaishou
_____ Bilibili	_____ Line	_____ Share Chat	_____ Josh
_____ Twitch	_____ Tumblr	_____ Medium	_____ TK
_____ QQ	_____ Rumble	_____ Clubhouse	_____ Picsart
_____ Hootsuite	_____ Clapper	_____ Likee	_____ Yubo
_____ Mastodon	_____ YouTube	_____ Teams	_____ Zoom
_____ "Red" or Xiaohongshu			
_____ others (please list) _____			

9. What online websites do you use alongside the apps?

☐ Edutopia	☐ BetterLesson	☐ Classroom 2.0
☐ edWeb.net	☐ ISTE	☐ Teachers CONNECT
☐ Canvas Commons	☐ Teachers Network	☐ Freshman Transition Network
☐ TeachersPayTeachers	☐ Teaching Channel	☐ The Current
☐ Education.com	☐ Verizon	☐ The Educator Collaborative
☐ PBS Learning Media	☐ Khan Academy	☐ TED-Ed
☐ 826 Digital	☐ Anneberg Classroom	☐ EDSITEment
☐ Ditch that Textbook	☐ Teaching for Change	☐ Smithsonian Learning Lab
☐ Education World	☐ FunBrain	☐ Kennedy Center Education
☐ Learning for Justice	☐ Gilder Lehrman	☐ National Constitution Center
☐ OpenStax	☐ ReadWorks	☐ Bill of Rights Institute
☐ ReadThinkWrite	☐ Science Buddies	☐ Scholastic Education
☐ Wakelet Education	☐ National Geographic Education	
☐ New York Times Learning Network	☐ Yale-New Haven Teachers Institute	
☐ Flipped Learning Global Initiative	☐ Open Educational Resources Commons	
☐ Foundation for Teaching Economics	☐ Smithsonian's History Explorer	
☐ others (please list) _____		

10. Check all that apply to the reasons you use social media or online website sources for your classroom and professional practice.

☐ Post/ Contribute Work & Related Ideas	☐ Gather Work-Related Ideas
☐ Both Post and Gather Work-Related Ideas	☐ Connect with leaders in the field
☐ Create a professional identity	☐ Solicit career advice
☐ Comment on/discuss education topics	☐ Lesson plans
☐ Forms and templates	☐ Academic interventions
☐ Classroom Behavior management	☐ Social-emotional needs
☐ Scaffolding lessons	☐ Special Education Accommodations
☐ Room decorating	☐ Professional Development
☐ Establish and maintain professional relationships	
☐ Solicit advice about personal professional situations or issues	
☐ others (please list) _____	

Appendix E - Research Study Debrief Form

High achieving Generation Z teachers use of technology to shape their professional practice and knowledge of education policy. This research further explored how Gen Z teachers prefer administrators to use technology when they lead.

Thank you for participating in my research study. Your stories are important and relevant to the study of how high achieving Generation Z teachers use social media to shape their professional practice. I would like to provide you with more information about the research and explain exactly what we are trying to study.

For this study, I am interested in exploring the stories of Generation Z teachers and how they use social media to shape their professional practice in regards to pedagogy, preferences to be led, and education policy.

Some of your data will be used in academic papers, to inform recommendations on policy and practice, and recommendations for future research. Your name, location, or other identifying information will not be included. You may withdraw from the use of your data for up to six weeks after the interview due to progress made on data analysis and writing of my dissertation.

If you would like to receive a copy of the final dissertation, you may find out at <https://krex.k-state.edu/>.

If you have any questions about this research, please ask me now, or please feel free to contact my major professor, Dr. Royce Ann Collins, Professor (Principal Investigator) at 785-532-5535 or racollin@ksu.edu. If you have any questions regarding your rights as a participant in this research project, please contact Lisa Rubin in the University Research Compliance Office with Office with the Committee on Research Involving Human Subjects at Kansas State University at 785-532-3224 or rubin@ksu.edu.

If you would like to contact me during the dissertation process, I may be reached by email at belew@ksu.edu.