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John A. Huss Northern Kentucky University, hussj@nku.edu

Shannon Eastep Northern Kentucky University

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A Tri-State Study of Middle School Teachers' Perceptions of Generation Alpha Students: Are Middle Schools Ready for "Generation Glass?"

John A. Huss

Northern Kentucky University

Shannon Eastep

Northern Kentucky University

Abstract

The passage to middle school has been identified as a confusing period for adolescents, involving a series of major transitions. A new variable that permeates these already lofty transitions is the firm entrenchment of Generation Alpha in the middle grades classroom, a cohort that includes anyone born from 2010 onward, making them the first generation born and shaped entirely in the twenty-first century. The purpose of this study was to explore the attitudes and perceptions of current middle school teachers across Indiana, Kentucky, and Ohio toward their Gen Alpha students so as to uncover the concrete issues these teachers encounter as they work with this undeniably unique cohort. A total of 139 teachers responded to the researcher-generated electronic survey, which was coded inductively and analyzed for content. The feedback points to a cohort that is digitally literate with great adaptability, but also a cohort that exhibits delayed social development and a myriad of global concerns. These factors all have implications for the ways they learn, interact, and function in the middle school classroom.

Keywords: Generation Alpha, Gen Alpha, teacher attitudes

Introduction

There is little disagreement that teaching in the middle grades is extremely challenging, and middle school students are consistently inconsistent. Tweenhood is torturous, and tending to those in the midst of it can be excruciating. The middle school experience is often called a bridge, yet many would consider it a dark mysterious tunnel that mutates our sweet babies into surly adolescents.

Such a characterization of the middle school years is nothing new. Kohut (1976) describes the age group as "emotionally erratic" (p. 7), and from the earliest literature on the middle school movement, leaders recognized the need for understanding the eccentric nature of the adolescent between the ages of 10 and 14 (Eichhorn, 1977; McGee & Krajewski, 1979).

The passage to middle school has been identified as a disconcerting period for adolescents, involving two concurrent milestone transitions, both requiring acclimation to new realities (Shoshani & Slone, 2013). First, students must shift from elementary school to the larger and more complex landscape of middle school, which includes considerable changes in social interactions and learning experiences (Parker, 2013; Brown & Klute, 2003). Second, the transition from childhood to adolescence is marked by a number of life changes, including greater family independence, increased responsibilities, early romantic relationships, puberty, and the emergence of formal operations (Vanlede et al., 2006).

The third variable, however, that now permeates these two already lofty transitions is the firm entrenchment of Generation Alpha in the middle grades classroom. "Gen Alpha," a term introduced by social researcher Mark McCrindle (2020), includes anyone born from 2010 onward, and they will number about 2.2 billion people worldwide by 2025 (Howarth, 2023). Gen Alpha students are frequently described as being "digital natives" who have grown up typing with their thumbs on smartphones and tuning out school-based interactions that do not capture their short attention spans (Huss, 2023). They are the most pampered and wealthiest in terms of materialistic possessions and gadgets, making them an instant gratification seeking, selfish, and overindulged cohort (McCrindle, 2020). They also appear to be a generation of children who are already showing signs of depression, and because of a variety of factors (including "helicopter parents"), they are not developing the coping skills needed to form resilience (Maas, 2021). Thus, the term "generation glass" has been used to encapsulate this age group, not only because they have grown up staring at the glass covered screens of devices, but also because of their fragility and aforementioned coping deficiencies (Amies, 2023).

The purpose of this study was to gather feedback from practicing middle school teachers across a three-state region of Indiana, Kentucky, and Ohio regarding their Gen Alpha students so as to uncover the concrete issues that these teachers encounter as they work with this undeniably unique cohort on a daily basis. The study highlights both the demands and triumphs that are occurring within the classroom. The explicit feedback can be used to strengthen our middle grades preservice course design and course delivery inasmuch as the findings reveal several distinct preferences of Gen Alpha students that are arguably in conflict with current instructional and grouping methods emphasized in most teacher education programs. The study can likewise suggest targeted professional development for practitioners in the field because survey responses suggest that there are problematic Gen Alpha characteristics for which teachers may benefit from training to enhance their skill set in managing the adversities they are encountering presently. Berckemeyer (2024) has acknowledged the "new characteristics" of middle school kids and indicated that simple tasks have become battles, and students seem to have lost their ability to "do school" effectively. In this way, the study can inform the practice and pedagogy of middle school education.

Research Questions

The current study was built around the overarching research query: "What are the perceptions and experiences of practicing middle school teachers regarding their daily interactions with Generation Alpha students in their classrooms?" The larger question was then divided into sub-categories, depicted in Appendix A, which examined specific aspects of those daily interactions:

- 1. What are the positive and negative personality traits of Generation Alpha students?
- 2. What are the study and learning characteristics of Generation Alpha students?
- 3. What are the technological and digital literacy characteristics of Generation Alpha students?
- 4. What are the emotional states of Generation Alpha students?

Theoretical Framework

The current study is rooted in generational cohort theory, which suggests that generations are distinguished based on the specific time periods into which people were born and the time periods in which they grew up (Hemlin et al., 2014). The members of each generational cohort reflect social changes in society occurring within the same period, important historical events, and the cultural values emphasized during the specific periods. This determines the unique experience of each generation (Parry & Urwin, 2011). It is accepted that these groups' events, changes, and experiences influence the values, attitudes, and beliefs of the members of each generation and set them apart from each other (Brosdahl & Carpenter, 2011). Gen Alpha, for example, has been shaped by a pandemic, a proliferation of online learning, school shootings, terrorism, environmental fears, cultural shifts in gender and sexuality, and hour-by-hour wired connectivity.

Literature Review

The fusion of middle school and Generation Alpha has yet to yield much data in the form of directed empirical studies and has yet to emerge as a concerted point of inquiry. Salleh et al. (2017) acknowledged the lack of formal research on Gen Alpha, attributing it in large part to the sheer newness of this cohort. Because Gen Alpha consists of children who have not been consistently investigated up to this point, it becomes necessary in many cases to look to the characteristics of Generation Z students, born between 1997–2010, because they preceded the current middle schoolers, and there is tremendous overlap between the two groups. By examining the existing literature on Generation Z, which is also limited, it is possible to glean snippets of information from a broad sweep of sources and assemble them in a somewhat fragmented fashion to illuminate what we know so far about the first generation who are born and shaped entirely in the twenty-first century. The review of literature thereby seeks to draw in as much relevant information as possible on diverse aspects of Generation Alpha and their schooling as opposed to narrowing the scope when the availability of resources is scant.

How Gen Alpha Uses Technology

They have been referred to as "screenagers" (Ziatdinov & Cilliers, 2021). Gen Alpha students, like their Generation Z prototypes, are heralded as being tech savvy, but evidence suggests that much of their expertise is more social, and often more precarious, in nature than academic. Dowell et al. (2009) surveyed 404 middle school students on their technological engagement and uncovered some concerning online behaviors. Thirty-one percent of the sample reported posting personal information on social networking sites, including a picture of themselves. Approximately 40% of both boys and girls disclosed having encountered sexually inappropriate material on the Internet while 22% percent of boys (compared to 6% of girls) admitted searching on the topic of "sex" while on the Web.

In the years that have followed, social media use has grown extremely high with 95% of middle schoolers engaging YouTube regularly, 67% on TikTok, 62% using Instagram, and 59% on Snapchat daily. Seventy-five percent have at least one active social media profile, and 51% visit at least one site daily. Fifty-six percent of tweens ages 8–12 have their own smartphone, and middle schoolers in homes with a household income of \$30,000–\$74,999 report being on the Internet "almost constantly" while those in households with incomes of \$75,000 or more register at 43%. Overall, preteens and teens are online an average of nine hours a day, not including homework time (Pew Research Center, 2022). The effects of all of this social media and online preoccupation are only beginning to manifest in the middle school classroom.

Interestingly, while middle grades teachers have lamented for years how students rely on Google and Wikipedia for content information, a new statistic now reveals that 40% of Gen Alpha prefers using TikTok and Instagram for searches over Google (Pogue, 2022). This preference for social media as an information source speaks to a middle schooler's priority to want to see visual representations of something as opposed to simply reading about it. The Pearson Education (2018) study, conducted by a New York—based global market research firm, likewise found that a majority of adolescents prefer learning from YouTube and videos generally rather than printed books. Fifty-nine percent consider it to be their preferred learning method. This method of instructional delivery is consistent with how Gen Alpha approaches knowledge acquisition in a classroom. They expect technology, not books, and when they opt for a book, they prefer storytelling to facts or instructions (Vizcaya-Moreno & Perez-Canaveras, 2020). In fact, only 12% of Generation Z students indicate that they learn best by listening to traditional class lectures, and we can likely extrapolate the same for Gen Alpha (Chalk.com, 2022). When the video game Minecraft was employed as a vehicle for assessing reading practices of Generation Alpha, players exhibited a clear partiality for learning through visual means (Taylor & Hattingh, 2019).

For present-day middle school students, "research is less about acquiring new knowledge and more about accessing a quick answer to complete an assignment" (Seemiller & Grace, 2018, p. 203). Coopersmith (2016) asserts that technology makes them able to do more while understanding less about what they are doing. Menendez et al. (2020) completed a comprehensive review of educational technology pertaining to Generation Z students and concluded that paying attention to

technologies alone is insufficient. Teachers soon discover that a large number of students are *websearchers* but not researchers. They are not adept at recognizing and separating non-valuable sources from legitimate sources (Huss, 2023). This generation of students seeks to "apply" rather than "know" (Omur, 2021).

According to Secondwave Learning (2019), evidence also suggests that modern secondary students may be losing their overall critical-thinking skills due to outsourcing their cognitive processing to computers and devices. The ability to ask thoughtful questions and challenge an assumption, however, still require the human brain and are not as easily displaced by a gadget. Likewise, West et al. (2018) determined that both action video games as well as navigation-assisted devices, such as Google Maps and other GPS applications, cause loss of gray matter in the hippocampus—the part of the brain used for long-term memory. Non-users exhibited higher functionality in their hippocampus than those that placed reliance on their devices.

In short, Gen Alpha has been exposed to advanced technology from an extremely young age and elements like touchscreens or voice activation from a device are now considered base-level functions. These students may be quick to embrace artificial intelligence (AI) and may consistently require tools and resources that are largely customized to them.

How Gen Alpha Learns

A key factor in how middle school students learn is the length of their attention span. A newer study by Shatto and Erwin (2016) revealed that Generation Z students have an attention span of eight seconds, which is a dramatic change from Bunce et al. (2010) who declared that teachers cannot expect middle school students to stay in a favorable learning state for more than 10–20 minutes without intervention, and Vawter's (2010) report of 10–12 minutes. Gen Alpha is expected to continue this "attention span of a goldfish" trend. Middle schoolers are accustomed to glancing at the teacher's Smartboard while simultaneously taking a peek at their own social media accounts. Seemiller and Grace (2016) insist that such multitasking has led to an increased "inability to focus" (p. 181). Students are unable to balance between the regular flow of new information in the digital environment and the flow in real life (Omur, 2021). Suffice to say that middle school teachers are dealing with students who require special strategies to combat the shorter and shorter cycles of classroom engagement.

While it has generally been accepted that middle schoolers love to talk, Zmuda et al. (2017) reports that Gen Alpha students are perfectly comfortable with virtual connections but do not necessarily do well with physical human interactions. Apaydin and Kaya (2020) likewise concluded that this generation may have limited social communication due to their dependency on technology. They prefer individual over group work and demonstrate autonomous rather than collaborative behaviors, which would certainly run contrary to conventional thinking among middle school advocates. The number of teens who prefer talking or face-to-face communication went down from 49% in 2012 to 32% in 2018 (Common Sense Media, 2018). Such inconsistency by students in the middle grades becomes especially challenging because students need to experience

partnerships with peers but are manifesting a desire for greater and greater independence. The lure of YouTube demonstrating quick do-it-yourself solutions to complex problems has left these adolescents with a growing indifference toward teamwork and cooperation. In fact, ethnographies have revealed that not a single member of this generation wants to share anything (Berkowitz, 2016).

Twenge et al. (2019) examined young people's reading habits and discovered a decline of daily reading of some form of print—whether magazine, book, etc.—from 60% in the late 1970s to 12% today. The authors suggested that "displacement theory" explains the phenomenon that social media is displacing time that youngsters may have formerly used to read. In a meta-analysis by Delgado et al. (2018) in the E-READ Consortium of over 170,000 subjects in 58 studies, young people demonstrated lesser comprehension skills when reading the same text on digital screens as opposed to traditional print. The greater comprehension through printed text became intensified when students were being timed. The authors revealed that digital natives were surprisingly comprehending text better when reading it in print rather than on screens. Ackerman and Goldsmith (2011) likewise compared the reading skills among Generation Z on print and digital mediums and uncovered similar findings. Students, however, self-reported that they did much better with digital and did not recognize that they read with less overall understanding and attention to details.

Kim (2011) found a decrease in the creativity of American students since 1990 with young people initiating fewer novel ideas. They also exhibit less imagination, humor, and elaboration. Although creativity is innate, it must be nurtured (Rettner, 2011), and the lack of pretend play, coupled with a school curriculum that is often prepackaged and round-the-clock technology that does the thinking for the student, leaves little opportunity for innovative and divergent thought.

The Mental Health of Generation Alpha

Limited studies have looked at mental health as it pertains specifically to Gen Alpha. The attitudes of this group would suggest a rather widespread acceptance of mental health, resulting in less stigma toward such issues. Currently, one in five Generation Z and Millennials are in therapy, and 83% of those openly tell others they are in therapy (Thriving Center of Psychology, 2023). Both of these generations tend to be the parents of Gen Alpha and, consequently, the openness in seeking help for mental health concerns is being modeled for the younger cohort and is informing perceptions at an early age (Therapist.com). McCrindle (2020) asserts that the isolation and boredom that resulted during the COVID-19 pandemic has had a profound effect on Generation Alpha because they experienced it in their formative years without the benefit of a broader reference point. Growing up with instant technology and instant knowledge, these students expect to achieve their goals immediately in the education process, and when this does not happen, they lose their belief in success. As a result, the anxiety levels of the students are high, while their stress management is low (Omur, 2021).

Summary

The sporadic research that exists points to a cohort that are digitally literate with great adaptability, but also a cohort that exhibits delayed social development and a myriad of global concerns. It is for this reason that the current study is necessary. Not only does it address Gen Alpha specifically in the early adolescent classroom, but it also focuses on the teachers who interact with them, which provides information that simply does not exist to date. This information may begin to provide a voice for these practicing teachers as well as develop some important guidelines for higher education instructors who are striving to prepare preservice teachers to become successful professionals in those middle level classrooms.

Method

Participants and Procedures

A sample of 300 middle schools from Indiana, Kentucky, and Ohio (100 from each state), the three states that largely comprise the sphere of outreach of the researchers' College of Education and middle grades teacher preparation program, was chosen from Educationbug.org, an online educational web directory of all public-school districts by state. The state lists were compared to the indexes from the Department of Education, thus ensuring the eligible populations were current and comprehensive. When the list of public middle schools across the three states was established, a random number generator from calculator.net was used to select a random number to identify the first middle school to be included in each state sample. Afterward, systematic sampling was employed to select every sixth middle school until a total of 100 was secured from each respective state list. A selection was discarded if a school was overtly identified as an "intermediate school" or a "junior high school." A school with that designation was omitted and the next so-named "middle school" on the list took its place, and the systematic pattern commenced. After the 300 schools were selected, the faculty roster for each school was obtained from the corresponding district or school homepage. A random number for each school was determined by calculator.net, and the teacher on the list who corresponded with that number was given the questionnaire.

Research Design

Survey research with an interpretive qualitative approach was applied to examine current middle school teachers' perspectives on Generation Alpha students. Survey research is an effective way to collect information about many individuals in a particular population (Fowler, 2008; Rubin & Babbie, 2013). The goal was to gain understanding of events from the actor's point-of-view by examining the *lived experience* of a group of participants centered on a shared experience or phenomenon. According to King et al. (1994), qualitative research has increasingly moved to adopt "large n" research logic rather than the "single n" setting, that single case logic that traditionally characterized the paradigm. Thus, the use of open-ended survey questions is appropriate for studying subjective experiences of a larger sampling of participants through personalized and conversational-style responses.

Instrument

The electronic survey was an anonymous researcher-generated instrument using Qualtrics, which blended a quantitative component in the form of four fixed response items with a distinct qualitative element accomplished through nine narrative open-response questions that encouraged detailed and personalized answers. An outline of the essential questions is found in Appendix A. The open-ended questions derive from the existing literature on Generation Alpha, which punctuate a growing interest in the learner characteristics, technology and social media usage, and prevalence of mental health and anxiety issues of Generation Alpha students. Babbie (2020) distinguished between the benefits of standardized questions, which strengthen reliability, and the use of open-ended questions, which can provide more valid responses because respondents are not forced to select from a list of discrete options established by the researcher. Because the term "Alpha Generation" is new and not necessarily in the daily vernacular of respondents, an operational definition was provided to ensure uniformity and understanding.

Self-Report Bias

Self-report bias is a methodological problem that results when asking people to describe their thoughts, feelings, or behaviors. It arises as a result of participants providing responses that are not fully accurate, either because the participant does not know the full answer or because they seek to respond in a manner perceived to be socially desirable (American Psychological Association, 2023). To promote open and honest responses, emphasis was placed on ensuring participant anonymity. To this end, limited demographic or identifying data were collected in the course of the research, including any description of the various middle schools (rural, suburban, urban) that could potentially connect a respondent with a general area of a state.

Data Analysis

The demographic data were analyzed using simple frequencies generated from the fixed response questions that required selection of predefined responses from individuals. Survey data from openended questions were analyzed manually through inductive coding and thematic text analysis that identified extended phrases, sentences, or words that occurred commonly within teacher responses (Popping, 2015). Theming the data allowed for making meaning within individual teacher responses and across multiple surveys, which, according to Creswell (2013), facilitates the discovery, identification, and labeling of repeated evidence. The primary purpose of coding in this manner is to develop the core categories that encompass and represent the central phenomenon under investigation (Mills et al., 2012). Compiling the similarities as well as disparities among teacher responses served to create a matrix of data pattern, which allowed the compressing of many words of text into fewer content categories. These core categories formed the basis for the emergent concepts detailed in the data findings.

Confirmability and credibility were enhanced through corroboration from an independent informant (Lincoln & Guba, 1985). Having the responses read and analyzed independently by a

second researcher served to establish a level of confidence that the research study's findings were based on the participants' narratives and words rather than potential researcher biases. The method was exploratory in nature as no specific hypothesis testing occurred. A scale was not developed because the self-reported, open-response items were analyzed separately. This technique is applicable where there is no objective reality that can be discovered by researchers and replicated by others (Walsham, 1993; Darke et al., 1998).

Results

The survey was completed by a total of 139 out of 300 teachers for a combined response rate of 46%, with 42 respondents from Indiana, 51 from Kentucky, and 46 from Ohio. Table 1 breaks down the total number of years the respondents have served as middle school teachers.

Table 1 *Years of middle school teaching experience*

Number of Years Teaching	Number of Respondents
0–5	46
6–10	39
11–15	22
More than 15	32

n=139

Teachers were asked to rate how tech savvy they considered their middle school students to be and produced a mean of 7.4/10. Conversely, the teachers reported that the students themselves would consider their tech savvy to be at 9.2/10.

Perceptions of Positive Traits of Gen Alpha Students

When describing the positive traits that teachers witness from Gen Alpha students in their classrooms, the majority of responses focused on the use of technology. One of those key attributes was the willingness to explore what technology has to offer. A teacher noted, "They are not afraid of trying new sites and different types of technology," while another stated,

When it comes to technology, Gen Alpha students are fearless. They dive into new tech with real gusto. MANY of my kids are gamers. It's no longer just boys either. . . . I'll bet the gaming among my students is almost 50-50. So, what does that mean? Gamers jump in without knowing all the rules. They learn as they go. They fail and don't care.

Teachers connected this comfort with technology to a greater versatility in how students are able to complete classwork. For example,

They can quickly create products on technology. In the past, creating a PowerPoint presentation to share what they've learned would have taken a week. Now, they can create

a Canva/Google slideshow/PowerPoint presentation in a matter of minutes. They also can quickly find answers to questions—more quickly than years ago.

Other comments included, "They have the ability to find any information they want through using technology," "Their use of technology is intuitive," "They are able to navigate the digital world in ways that earlier generations cannot," "They are adept with using technology to collaborate and express their creativity on projects," and "They are very comfortable with technology and are very connected through social media to communities all over the world. Because they are so connected they often bring new ideas from those social media connections."

Aside from prowess with technology in Gen Alpha, teachers also highlighted positive traits for these students in how they relate to others. A teacher echoed a common observation, "For the most part they are more inclusive." Another respondent noted the tendency of Gen Alpha students to use classmates as resources.

They do not hesitate to crowdsource between themselves in order to discuss a problem. They will share pictures or notes with each other in order to communicate or accomplish a task. They will easily create a group chat in order to communicate.

Similar observations were offered: "Gen Alpha students are great at collaborating with each other and sharing ideas," "They want to help others and are able to show a lot of empathy," and "They are accepting of diversity."

Perceptions of Negative Traits of Gen Alpha Students

While the use of technology by Gen Alpha middle grades students was often viewed as beneficial and productive, the teachers also underscored several negative characteristics they observe in their classrooms. Said one, "Students seem to have unrestricted online access at home and are getting too mature too quickly, which makes traditional schoolwork tame and boring for them." Another teacher made a similar assessment: "The distraction of all the technology! They are so used to having a device in their hand that what I bring to instruction at times seems far less interesting," and "While they know how to use technology well, they also become very distracted by technology (temptation to play games, get on social media, check email frequently) and this leads to a DECREASE in their ability to succeed." Yet another teacher said, "Technology is frequently used by students to cheat on assignments and tests." One teacher captured the overall sentiment of many of the respondents:

These students have an incessant need to be entertained. They are saturated in pop culture and have a hard time relating to content that is outside of it (read: no concept of anything classical or traditional). They feel like they must be plugged in or streaming at all times. As a group, they have trouble sitting and waiting patiently without opening a computer; they have trouble with long-term assignments; everything is boring because we are not

entertaining them; they seem to be losing the ability to think for themselves and problem solve without the aid of technology

The effect of technology usage on overall communication skills was a definite point of concern: "They are not social because of texting and their people-skills need to improve," "They write in text lingo and slang; it is almost impossible for them to utilize correct capitalization, grammar, punctuation, even in formal writing," "They honestly have zero comprehension of the difference between formal and informal writing. Everything is informal, and if it isn't, they constantly complain," "They lack interpersonal communication skills," and "I see an avoidance of handwriting. Fine motor skills for handwriting are nearly non-existent for most of them," "They cannot write legibly if the computers quit working." A teacher expounded on this theme:

The ability to spell is almost non-existent when not using or having access to a computer. The great majority of my students are auditory and visual learners. When there is no access to a computer or Internet, they struggle to have deep and meaningful conversations or thoughts for fear of being wrong.

In somewhat of a contrast to the assertion that Gen Alpha students are more embracing of others, several teachers pointed out, "They like to work independently to complete tasks," "Gen Alpha students enjoy creating, crafting, and making things their own and customizable/unique without input from others," "They often struggle to connect personally with each other and teachers. They appear more comfortable interacting virtually than in person," "They are disrespectful toward authority and have more difficulty working with others in collaborative situations, extremely independent," and "They do not socialize very well. Everything is an argument."

Teachers made several references to the displacement of traditional skills with technology: "Students have dependence on spell check, copy/paste, relying on digital tools like calculators and digital clocks (losing skills that have always been taught in schools before the explosion in technology and one-to-one), and "I began to realize that students could not read my handwritten comments on their papers and needed me to interpret the cursive for them."

Students seem to struggle with fundamental math operations, simple grammar, and basic reading and spelling. They do not know the history of the world or current events beyond pop culture. I hate to say it, but Gen Alpha may be our dumbest generation.

The negative issue that resonated most with middle school teachers and how they perceive their Gen Alpha students was centered on the perceived lack of motivation to learn. A teacher pointed out, "I see a very short attention span. Lazy—no intrinsic motivation for academics, but ironically, very grade conscious. They have the idea that tasks can be completed 'later,' and not in class, and [an] inability to meet a deadline." Said another, "A higher percentage of students seem to have troubles with impulse control. Gen Alpha students have a tougher time coping with disappointment, disagreements, boredom, setbacks," "They have shorter attention spans than ever

before, can be difficult to keep engaged," and "They have a do-not-care attitude. There is no sense of urgency to completing work as they feel like there is no consequences for not doing it."

Lack of grit, lack of ethics regarding work, lack of focus when using technology to aid learning, disassociation with how others feel, sleeping is a big issue due to devices keeping them awake at night, etc. They really struggle once they open up their device to actually learn.

Gen Alpha students can be very lazy. They do not like to put in a lot of effort to achieve something and look for shortcuts even if those shortcuts end up giving them the incorrect answers. They also seem very uncomfortable when they are not using technology for their schoolwork, and some even become hostile when they do not have access to it.

They have very little focus or interest in anything beyond what they themselves initiate. Largely a product of being able to wall off exposure to anything that does not exist in their Internet bubble. Very uninformed about the world around them.

They struggle to keep distractions minimal and stay focused on a task on a computer (ads and pop ups or easily accessible links to other "more fun" tasks). They are quick to hide or close out of a tab to avoid someone catching that they are off task. They struggle to "give up" a computer or tablet and feel that it is their possession that cannot be taken away from them.

Closely related is the attention span of Gen Alpha middle school students. Teachers' comments included: "Their attention spans and stamina are minimal. I have to keep mini lessons under 10 minutes in order to catch and release often," "It is difficult to engage Gen Alpha students in critical thinking activities. They don't want to concentrate and think beyond what is right in front of them," "Keeping their attention, things need to be very fast paced," and "Short attention span, inability to remain quiet and focused on the person speaking."

In short, teachers were consistent in their description of Gen Alpha students as exhibiting short attention spans and being more interested in on-demand rather than linear content.

Perceptions of How Gen Alpha Students Prefer to Learn Content

Teachers were asked to identify the resources they think their Gen Alpha students use most often when doing schoolwork, as shown in Table 2.

Table 2What resources do you think your Gen Alpha students use when searching for information for schoolwork?

Resource Used	Percentage
Google	52.27
TikTok	25.00
YouTube	13.64
Instagram	06.82
Twitter (X)	02.00
Misc. Other (Snapchat, Photomath)	00.27

When asked to identify the top delivery method their students most prefer for learning classroom content, over 35% identified YouTube or other videos while only 3% said "traditional lecture" and 0% said "reading."

How Teachers Adapt and Customize Instruction

On a closely related issue, teachers commented on how they have (or have not) adapted their instruction and assessment to better meet the specific needs of Gen Alpha students for instantaneous, on-demand answers to everything. Some admitted they have definitely tried to acquiesce: "Shorter assignments with less repetition, differentiation at all levels whenever possible, station teaching," "I created our online textbook, and everything is interactive/on a MacBook in class. Even grades are usually instant (outside of writing assignments)," "The major change has been breaking assignments into much smaller pieces and giving formative feedback at each step," "Most lessons are on Schoology where answers are given immediately," "I have incorporated more videos and more of my assignments are self-grading as we are a one-to-one school," "Tools like Schoology and GradeCam provide instant feedback on multiple choice and fill-in-the-blank questions. IXL also does this," "The major change has been breaking assignments into much smaller pieces and giving formative feedback at each step," and "We have been using an online platform for tests so that students can get immediate feedback."

Other teachers were steadfast in their opposition to this premise of adaptation and customization: "Not really. I WANT them to have to work to find/formulate answers," "Honestly, no. They need to be able to slow down and learn that answers do not always come instantaneously, especially in a subject like science," "No. That is not a need, but an unrealistic expectation that will serve them poorly in the future," "I have kept most things the same because there is value for slower, systematic learning in brain development and they need to build these skills," "State testing doesn't modify the expectations, so many of the mundane, old school items still have to be taught in a lecture fashion whether students tune out or not," "They will still need to interact with humans and have human expectations in the workforce. I aim to model this in my classrooms and have conversations about those expectations," and "They need to be able to slow down and learn that answers don't always come instantaneously, especially in a subject like science."

Because cheating is so rampant when it comes to online assignments, I have actually had to double down and revert back to paper-and-pencil assignments if I really want to know what a student can do. I don't want to spend all of my time fact-checking my kids' work. . . . It's such a tedious process. I also have to create unique assignments whose answers cannot easily be found by a simple Google search. Basically, I spend most of my time fooling kids into doing good serious work.

On the topic of how the teachers have attempted to customize assignments for individual students, one teacher noted, "Students often can create their own layouts, designs, themes, etc., on larger projects," while another explained, "More CHOICES—format of assignments—instead of traditional paper, maybe a podcast, or a blog, for instance." Other responses included:

Students are given a topic and can choose from maybe 4–5 options on how they're going to submit their assignment. Maybe if it's a presentation about Beethoven—they can make an iMovie, a slideshow, a canvas presentation, etc., showing the information they were required to learn. I usually ask for a part of the assignment to share their own thoughts/opinions as well because they like to share that.

Once again, working within the confines of a prescribed curriculum, I try to offer students a choice among three or four assignments when working on projects or independent work . . . as long as they use paper and pencil. The introduction of AI has become a big issue. Most students do not have the ethics to not use it because they see nothing wrong with not doing the work if they have AI to do it for them. Paper and pencil make them engage their brains if done correctly.

Interestingly, the extent to which teachers in the sample embrace the idea of overhauling their instructional delivery and classroom expectations to accommodate the preferences of Gen Alpha students was a wide continuum, consisting of those who acknowledged the need for strong stimuli in every environment and are committed to adjusting to each student's pace whenever possible to those who resist the further creation of a generation of youth who are already viewed as impatient and self-indulgent.

Perceptions on Humor as a Pedagogical Tool

Teachers were asked about the use of humor in their classrooms and whether the idea of humor as a pedagogical tool receives their support: "Humor is a MUST. For teachers and students to get through the day. I find myself trying to be a stand-up comedian often to keep them interested in tasks or at least engaged/listening to what gets presented," "Yes, they love humor. I use 'Dad Jokes' all the time for engagement and they seem to really respond to that," "Humor is what keeps them engaged, otherwise they are sucked into the technology too much. Personal connection comes through humor which is an important aspect to teaching this group," "Yes I utilize humor and my students respond by calling me 'mid' or 'cringe' or 'old,' yet I still use it because occasionally

someone laughs," and "Yes, I typically will try to find some kind of cringe video for students over the concept. They say they hate it, but they all reference it throughout the year."

Good heavens, yes! I am a high-energy, low-threshold-for-boredom kind of guy, and I use humor from the moment the kids walk into my room until the last bell of the day. I love to laugh, and I love it when my kids laugh (either with me or at me). My eighth-grade students are VERY low-key, and they REALLY struggle with boredom, so I try to keep things light and fun, but I balance that atmosphere with high expectations and the belief that I can make the kids better readers and writers if they will come on the journey with me. Humor in a middle school is an essential teaching tool.

Several teachers confirmed their use of humor to reach their Gen Alpha students, but did not always find it to be overly successful: "Humor is always welcome but they tend to only react to inappropriate humor," "Gen Alpha seems to take humor way more literal than previous students in previous years," "It seems like they find things less funny than they used to," "They don't 'get it' very often," "They respond well to it, but they also see it as a signal that serious work is over and it is time to play," "Gen Alpha appreciate humor but do not understand humor adults tend to use. They prefer more slapstick comedy, which is not appropriate for school setting," and "Some don't get it if it is not a meme."

Changes Teachers Make to Accommodate Gen Alpha Needs

Teachers were prompted to identify a change they have implemented in their classroom or teaching specifically to address Gen Alpha student needs. "I am very flexible on due dates. I just want the students to learn, and I take work that is late without issue for the most part," "Flexibility," "Less time on the computer and more time in discussion with other students and paper and pencil work," "I have recently implemented a reward system and grade checks since teaching Gen Alpha students," "I have implemented more self-guided learning," "More literal in explanation. They have difficulty understanding nuance, metaphor," "I would say I am way more aware of how their family and outside situations affect their schoolwork. For example, I may give more time to complete something if they are having family issues or need support," "I used to hate bribery in the classroom. I know have started buying vinyl stickers of different students' interests to encourage and reinforce positive behaviors in the classroom," "Teaching them to work in teams and communicate in person," and "Less technology in the hands of the students. Aiming for routine and consistency in the form of the lesson and procedures in class."

One positive change I have made is using technology to provide more detailed and specific feedback on things like writing assignments. One negative/challenge I am dealing with is trying to get students to follow directions given their short attention spans and unwillingness to read directions carefully on their own.

Ironically, I have taken out technology in the last few years. At first it was all about one-to-one, and adding more technology, but as an educator I quickly realized that the computer was often more of a distraction.

I have incorporated more technology into my lesson than ever before. Students watch videos and create projects on Google Slides where they can work together. This has helped students in several ways. Most importantly working on researching skills because, although they know how to code, they do not know where to find credible information or how to even search for the information they want. Students also struggle with pulling information from a website and making sense of it.

Making sure I stay current and relevant to hold engagement. Engagement is key, and engagement is hard to maintain. They are used to TikTok and instant gratification, so if it is not relevant they feel as if they can figure it out or look it up on their own. All tests are open-note because the reality is they can look it up anyway. When it is open-note they get a benefit to take notes and usually want to. This keeps them writing of their own accord.

While other variables were certainly introduced, technology once again appeared at the forefront of teacher attitudes toward adjusting their instructional approaches. Some teachers expressed they have deliberately removed or curtailed their use of technology while others have elected to increase usage and take on the challenge of competing with the lure of social media apps for student engagement.

Perceptions of How Gen Alpha Students Interact in the Classroom

When asked about their Gen Alpha students and how they interact with others, teachers had a wide spectrum of responses: "They do not communicate well with others. Their tone sounds like sarcasm and overall rudeness. They forget so often what they say in person can be hurtful to those around them or even when they talk about themselves negatively," "They prefer to work with others who they choose. If they don't want to work with someone, they will let it be known or shut down," "It is more difficult for them to collaborate. Their independent work is better, but many are so apathetic about their academics that it is difficult for them to motivate themselves," "They do not work well with others. Most things are a fight over who is correct. They do work independently very well," "They struggle in teams and need to learn how to handle any challenge as they work together. They seem to work independently okay," "Students do not care as much for group work, and group work often comes with conflict, or poor delegation unless very structured," "They still crave time with peers, but they need more coaching through social situations than in the past. They work very well independently, and most prefer independent work when they aren't able to choose their own group, "They really struggle in working with others. They much prefer a computer open and no discussion," "They struggle to sustain tasks both individually and in groups," and "Maybe more students seem isolated nowadays and they prefer it that way."

Sometimes students will work well if they have choices in the assignment, but I have to monitor that the content they choose is standards-based and not self-indulgent. They are typical of all seventh graders when it comes to being around who they "like" and who is "cool," so that has an effect on their performance.

When they are in groups, they tend to all want to be on their devices (here, MacBook or phone). Sometimes they ARE looking for information, but a lot of times they are doing that plus other things (checking social media, looking at themselves in the camera, playing games). Usually there is one kid in the group asking the others to get to work. They work independently well, but again, they are distracted by all of the "things" that their devices hold. I gently encourage them to use their time wisely, stay on task, ask them questions as they are working, etc.

It became apparent through the teacher responses that many of their middle grades students are not seen as fluent in soft skills, such as in-person communication and interpersonal dynamics.

Perceptions of Anxiety and Mental Health in the Gen Alpha Classroom

Teachers had plenty to say on the topic of anxiety and mental health issues in their classrooms: "I can say with certainty this group of students has much anxiety and lacks confidence in their own skills much more than groups five years ago. Lack of coping skills is a common topic." "Some students have legitimate emotional and mental health needs, but this group can manifest symptoms and not have a need. Their behaviors are evolving into these manic characteristics that would normally cause concern, but which are increasingly the norm."

Gen Alpha students have more anxiety toward what should be normal life situations; they have a difficult time with redirection. Many students show an entitlement and when they do not receive what they feel they are entitled to, it becomes a struggle with authority and the institution of education.

Anxiety and mental health are completely different than 10 years ago. I am not sure if it is because we are more aware of the issues or more children suffer from these issues. But there is always a day when at least three to five students minimum (the other day there was 15) need to see a counselor because of anxiety or mental health. More kids have "time out" cards which allow them to take a break when overwhelmed, more kids use fidgets, more kids have 504 plans than ever before due to these issues.

More than ever!!! I have students dealing with anxiety, depression, and suicidal ideation. We have two guidance counselors and students often ask for breaks in class to speak to a counselor. I have large groups of students and accommodate struggling students almost daily. (I have strong opinions as to why this is occurring, and while I believe technology and social media play into this, there are other factors as well.)

Every day we see students who need to have a check in or need to see a counselor. Sometimes this leads to a complete shut down, and you feel like you want to spend time with that student to help them get through the day, but there are 29 other students waiting for you to continue the lesson. That balance is hard.

Digital addiction is the worst problem. Absolutely horrible. I'll be honest, they would be better off with no internet in schools. I know people like to quip "this is the world they live in," but we are truly doing them a disservice.

Teachers were very aware of the presence and prevalence of social-emotional struggles in their students and recognized that mental health plays a vital role in a student's ability to make connections with others and learn well.

Discussion

The overall feedback from middle school teachers uncovered several significant perceptions of Generation Alpha students as well as subsequent implications for the classroom. The teachers commented on the nature and dispositions of Gen Alpha students, how they like (and do not like) to receive content information, what obstacles teachers face in designing instruction and activities for these students, and what strategies seem most likely to bring desired results.

Teachers perceived their current Gen Alpha students as being almost wholly shaped and influenced by the digital world into which they were born (Cillers, 2017; Mohr & Mohr, 2017, Seemiller & Grace, 2016) and through which they are now experiencing adolescence. Middle schoolers are notorious for having their heads down, but while middle schoolers of the past were likely trying to grab a quick snooze, Gen Alpha students of today are more apt to be looking at their phones. Whereas many teachers may have previously looked at technology as a classroom *tool*, their students view it as a way of life. This incongruity has created a dilemma for teachers who question whether the middle school classroom should be a space where children can unplug and just be present or become yet another daily setting where they are perpetually connected digitally.

Helping Gen Alpha Navigate Digital Overload

It was very telling when teachers were asked to identify the resources their students use to seek information for schoolwork, and no one mentioned a book or anything to do with a library. Teachers are concerned that students are simply grabbing information from undependable sources without vetting or synthesizing that information. If a social media influencer said it, or if it is the first match that popped up in an online search, then it must be true! Gen Alpha students do not immediately seek adult figures to provide help. In fact, 71% of them declared they try to figure it out on their own through the Internet or from friends/classmates (Pearson Education, 2018). Students do not grasp that technology may "know" the answer to a math or geography problem, but *they* actually do not. Discussing technology with middle school students no longer involves showing them how to save a document to a floppy disk or CD-ROM or how to download an image

of an Egyptian pyramid from Ask Jeeves. Rather than longing for the good old days when playing around with font sizes was the extent of students' computer classes, teachers need to help them see the difference between accessing information and actually learning information through intentional guidance and instruction as students encounter the myriad of data sources available to them online. Teachers must help students to identify unsupported information and even unlearn certain misinformation.

This procedure can begin by being intentional about teaching information literacy. Using a mnemonic device like CRAAP (Currency, Relevancy, Authority, Accuracy, Purpose) can help middle school students remember what is important in evaluating a source (Muir, 2023). As an example, Colak and Aydin (2022) evaluated the effectiveness of mnemonic devices with middle grades students by utilizing a nonequivalent pretest-posttest control group model, combined with focus group interviews with middle school students, and concluded that teaching using mnemonic strategies enhanced the retention of historical components within social studies courses. Introducing students to kid-friendly search engines like Kiddle and KidzSearch may be useful as well. Perhaps most important is to convince the impatient tween to delve through sources. The first few results of a search may not necessarily be the most applicable choices. Wineburg et al. (2016) revealed that 82% of middle schoolers could not distinguish between an ad labeled "sponsored content" and a real news story.

A focus on cultivating both creative and critical-thinking skills is very much needed for Gen Alpha. Teachers must provide structure for thinking (brainstorming, debating, and problem-solving). Teachers must purposefully provide opportunities for students to think objectively about ideas and voice those thoughts in a discussion or writing format (Mind by Design, 2024). Curricula should include lessons that teach students how to sort through masses of information and determine what is valuable. Teachers should seek out appropriate digital resources and apps to engage students on their level and allow them to connect to their content in a meaningful and personal way.

Getting the Message to Gen Alpha (They Are Not Reading Us Loud and Clear)

The teachers affirmed that Gen Alpha students are indeed immersed in a visual culture where instant information is demanded, and video content takes preference over any other form of instructional delivery. How can the middle school classroom adapt? Teachers can appeal to Gen Alpha by moving away from auditory learning and creating short YouTube—style how-to and explainer micro-learning videos. When creating a micro-learning video for Gen Alpha students, a teacher should (1) select the topic and keep it focused on a single objective; (2) plan the talking points and keep the video centered on those specific ideas; (3) support the talking points with visual content or demonstrate—show don't tell; (4) keep the video short by avoiding the tendency to repeat ideas with introductions and conclusions; and (5) give some type of online quiz to reinforce the key ideas (Panopto.com, 2019).

According to Wolf (2019) teachers must counteract both students' cognitive impatience and their frequent inefficiency in perceiving the complexities of argument and thought in deeper, more demanding texts. Despite a teacher's commitment to digital delivery, it is necessary to utilize

traditional text on many occasions. Therefore, it is advised that text be optimized for reading efficiency because middle school students will scan rapidly for key points and neglect most of the surrounding content. The text should also be viewed as pragmatic rather than abstract and intellectual. Teachers should limit the number of actions required from a student.

Another factor to consider with Gen Alpha and reading is that present-day middle school students represent the vanguard of a cursive-less world. From handwritten comments on student papers to asking students to read historical documents and journals, teachers must recognize that these texts must be interpreted for students or printed. One can certainly debate the overall loss of cursive handwriting in modern society, but in the immediate, teachers must come to terms with this new reality of their Gen Alpha classroom.

Teachers can defer to the do-it-yourself approach of Gen Alpha students by allowing assignments and projects to be customized and personalized whenever possible. Designing every activity with a specific template or blueprint will only run contrary to Generation Alpha's desire for uniqueness and personal expression.

Marin and White (2016) contend a flipped classroom model can both facilitate and support inclass time for students to share their interpretations and engage in deliberation. Teachers can prerecord or select videos in a flipped classroom for students to consume individually before moving into whole-class instruction. Such a shift allows students to think for themselves before discussing with partners or a whole group. This type of digital media appeals to Gen Alpha learners and, if viewed prior to class, allows classroom time to be dedicated to application of the ideas and student exchanges guided by the teacher.

Laughing and Learning

Teachers were open to the use of humor as a pedagogical tool within their classrooms. As Wormeli (2019) argues, middle school students love anything that challenges conventions, particularly if it is humorous. Wormeli (2003) further contends that allowing humor in the classroom, even pursuing it on occasion, is just as vital to teacher and student success as are carefully designed lesson projects and assessments. He further claims that he has yet to see a successful middle school classroom that is devoid of humor. An often-overlooked element of teaching and engaging Gen Alpha students is the use of humor. Some middle school teachers inexplicably bypass the importance of humor and consequently lack a "teaching presence" that extends beyond the managerial and technical aspects of their interactions with students (Huss, 2023). An oversight of this nature is detrimental simply because the modern student utilizes humor as a coping mechanism to confront social issues as well as personal insecurities and perceived external threats. A much-needed giggle can often lead to a connection.

To resonate with Gen Alpha students, teachers need to think as entertainers do because they are battling for the student's brain against an onrush of compelling and arguably addictive elements (Huss, 2023). Gen Alpha wants teachers to be interactive and engaging as opposed to managerial

and mechanical. The willingness to make a classroom more "humanized" and stress-free is a decision that the teacher makes, but it involves time, practice, and ideas to implement it effectively (Huss, 2023). Students are certainly seeking relatability and caring in their teachers, and this type of social-emotional learning is clearly an important component of the guiding middle school foundation of an inviting, safe, inclusive, and supportive school environment (Association for Middle Level Education, 2020).

Humor for middle school students is a communicative attitude (Chiasson, 2002). A teacher can begin to spawn this attitude during the first days of school with the inclusion of icebreakers and get-to-know-you games. Teachers can introduce themselves to students with a top-ten list, like "Top Ten Funniest Things about Your New Language Arts Teacher" and encourage the children to create their own lists to share. Classroom expectations can be presented in similar fashion: "Top Ten Behaviors that Drive Your Teacher Bonkers." Pretending to be harried as the list is delivered allows the teacher to get these points across while maintaining an air of accessibility (Huss, 2021).

Deiter (2000) explained that humor focuses primarily on *how* to teach, but not *what* to teach, yet when employed properly, humor can be a teaching tool that expands the amount of *what* that is ultimately learned by the students. There are many strategies that can be infused into a middle school classroom to utilize the power of humor, including adding humorous items to quizzes, tests, and assignments; posting humorous quotes and cartoons in the classroom; having a "joke Friday;" or using comical video clips to introduce or reinforce a lesson. Attempts should be made to identify opportunities to introduce a non-sequitur, absurdist experience into classroom lessons throughout a given week (Wormeli, 2019).

Together or Apart?

Another significant observation by teachers is the increasing tendency of Gen Alpha middle schoolers to desire independence over group work. The teachers in the current study articulated how they dutifully placed students in groups and discovered a growing inability of those students to cooperate and engage with one another successfully. That is, according to Seemiller and Grace (2016), because these students are intrapersonal learners and prefer individual work over group work. A polarity actually seems to exist in that students may tolerate, or even enjoy, *learning* material in a social setting with others but prefer *working* on their own (Thomas, 2019). They seek learning that is self-paced, self-directed, and solitary with the freedom of what and how they learn (Seemiller & Grace, 2018).

Teachers Anxious over Student Anxiety

Teachers were consistent in their acknowledgment of anxiety, depression, and mental illness among their students. This is perhaps the greatest challenge facing the modern teacher because, quite frankly, relatively few teachers have been adequately trained to spot the signs of trauma and respond to them appropriately. Teachers read journal entries and essays, notice when a child is not paying attention and other changes in behavior, and see how students relate to classmates in

different scenarios (Anderson & Cardoza, 2016), yet there are only so many strategies that can be incorporated in a pre-service teacher preparation program or in sporadic professional development sessions. Teachers can say "that's not my job," but when the trauma is sitting in front of them in social studies class, or during a math quiz, and they do not feel like they have the skills to address it, it can be debilitating (Newberry, 2021). It is important for teachers to offer support and encouragement, give extra time to complete assignments, make physical activity and even mindfulness practices a part of everyday instruction, and use trauma-informed education approaches that give each student a sense of safety and inclusion (Lochrie, 2022). On the most basic level, it is important to simply listen, check-in with students often, and be perceptive of concerning signs, especially those that are clearly more than developmentally appropriate "blips." The teachers in the current study referred to several such approaches while attesting to the pervasive nature of these occurrences within their classrooms when compared to previous years. The emphasis on wellness has indeed become an increasing priority.

Where Might We Need to Adjust?

The teacher responses, in union with the early seminal research on Generation Alpha, point to changes or adjustments that need to be considered in both pre-service middle grades teacher preparation programs and in the types of professional development being delivered to practicing teachers in middle schools. For example, those who work with Gen Alpha students, or will work with them in the near future, should receive instruction on how to accommodate the multitasking proclivity of the students. Rather than planning for a class with sequential cognitive structures, they must plan for a class with parallel structures. The contemporary middle school student is accustomed to dealing with multiple stimuli simultaneously as opposed to having one instruction given at a particular time and then waiting for the first instruction to be finished before the next step of instruction is delivered. The goal may not be to eliminate multitasking entirely but to have strategies for *managing* the classroom around the multitasking to minimize the sustained effects.

Teachers can introduce a designated period of silence, so students experience what it feels like to work without distractions and know that it has value as part of the learning process. Similarly, teachers should also plan intentional mini breaks after a period of concentrated work. Ironically, teachers need to be aware that *they* are often the ones encouraging students to do multiple tasks. They are asking students to write and take notes while also expecting them to listen to the teacher talk or watch a presentation (Tailor-ed Practice, 2017). Such teaching habits merely feed into the students' tendencies to do several things at the same time.

As the teachers expressed throughout their responses, students prefer graphics and video over text. Making use of a graphic, or visual, essay (multimedia essay that combines traditional essay writing elements with images and graphic design) is one solution available to teachers. Another option involves nonlinear text, which allows readers to control their own movement with text normally accompanied by graphic-visual representations. The reader creates the path through the information, not the author (McNabb, 2006). Rather than presenting information via linear

textbooks, teachers can employ flowcharts, graphs, story maps, hypertext, interactive slideshows in Google Slides, nonlinear stories that have many possible endings, and other alternatives. As Kalkhurst (2018) describes, digital resources appeal to Generation Z students because they can access class materials on the same devices they already embrace. Generation Z wants to seamlessly jump from their personal experiences to their educational experiences on-demand and do it outside the classroom anytime, anywhere. In fact, 78% of students prefer digital course materials (Schramm, 2015).

Universal Design for Learning (UDL) is another teaching approach that is potentially compatible with Gen Alpha students because it offers options for meeting the needs of all learners by incorporating flexibility through multiple means of engagement, representation, action and expression (Mackey, 2019). While middle schools that follow the middle school philosophy would already consider themselves to be learner-centered, such practices have not been uniformly adopted (Olofson & Knight, 2018). A survey of 373 middle school teachers and principals in the Southeastern United States revealed mismatches between perceptions and implementation regarding instructional beliefs and practices. Relating to the overall curriculum, participants identified "engaging in active learning," "multiple teaching approaches," and "curriculum that is relevant, engaging, and challenging" as important, but noted they were implemented either occasionally, rarely, or never within their respective schools (Alverson et al., 2019). With UDL, learner variability with multiple means of engagement is the norm (Schwartz, 2022), and students are given assignment options as well as flexible workspaces, both of which are consistent with Gen Alpha learners.

When considering the learning preferences of Generation Z, these students are decidedly intrapersonal because they can focus, set their own pace, and make meaning of their learning before having to share that meaning with others (Seemiller & Grace, 2017). From that aspect, such a scenario arguably challenges the standard middle school approach that supports and encourages frequent collaboration. As recently as 2023, organizing the classroom for group work was being touted as a go-to strategy for building the ideal middle school classroom for learning. According to Sullivan (2023), groups are the focal point for student work and learning. Perhaps a modification in this area is justified. Teachers can assign individual projects that focus on digital content creation appealing to the students' desire for independent work and familiarity with visually stimulating material.

Limitations and Future Research

While 139 middle school teachers across three states completed the questionnaire, which facilitated a compilation of prevailing patterns among current teachers, there are still many teachers for which we received no participation, and clearly the findings in this study represented only the perceptions of those instructors who partook in the process. The questionnaire itself was designed for expediency with a user-friendly composition for busy teachers. Therefore, it was likely not as expansive, or inclusive, as an instrument could have been under different circumstances.

When considering future research, it would be advantageous to interview a representative group of middle school teachers to encourage introspection and to extract more in-depth reactions to their experiences with Generation Alpha students that would extend beyond the limited output of a questionnaire. It would also be interesting to determine the generational cohort of the individual teachers in the study to discover if teachers from various cohorts (Boomers, Generation X, Millennials, Generation Z) approach or interpret these students differently. Further, making a comparison across teachers from different content areas as well as locations (rural, suburban, urban) may uncover whether certain disciplines or geographic regions are more or less conducive to meeting the needs, dispositions, and learning preferences of contemporary middle school students.

Investigating the long-term effects of using micro-learning videos on Generation Alpha's retention and comprehension of complex concept as well as research to explore how different teaching strategies impact the development of critical-thinking skills in this generation are likewise recommended. As a follow up to the current study, delving into additional factors like school environments, parental education levels, and earlier educational experiences may uncover the influences of such characteristics on Gen Alpha students.

Conclusion

It can be easy to get caught up in the cutesy "hormones with feet" version of the middle school student and overlook the extreme complexities involved in teaching and interacting with this extraordinary group of learners. Both the literature and the feedback from the teachers in this study revealed that Gen Alpha middle school students are true digital natives who crave immediacy and autonomy in their education. They are diverse and more willing than previous generations to speak out against inequality. They are also prone to struggling with some degree of anxiety and depression. These factors have implications for the ways they learn, interact, and function in the classroom. The modern middle school teacher must contend with this talented, yet volatile, group of young people and prepare them for a future where over 65% of Gen Alphas will be employed in jobs and careers that do not even exist today (Howarth, 2023).

The cumulative responses of the teachers in this study seem to describe a group of young people who are highly susceptible to offense and consistently self-absorbed and self-scrutinizing. Although the term "snowflake" may actually go back to the 1800s, it became quite common as a way to describe Millennials. At the risk of being trite, it is quickly becoming ensconced in Generation Alpha as well. Between social media, which arguably presents our students with an exaggerated opinion of self, and hyper-protective parents who inadvertently create emotionally vulnerable and excessively entitled children, the middle school classroom is populated with adolescents who have little tolerance for real-world challenges. According to Camarata (2017), a child's unsuccessful attempts are actually opportunities to learn persistence and resilience, as well as how to cope and make adjustments when things do not go as planned and desired. Failure and overcoming failure lead to neurological development that bolsters thinking ability. Opportunities for a child to try—and to fail and then try again—are a crucial part of learning and brain

development and should be embraced rather than viewed as psychologically damaging events. Yes, even schools can be guilty of coddling students by declining to teach them the real-life consequences of not meeting responsibilities.

Tippett (2017) remarked that we know the old forms are not working, but we cannot yet see what the new forms will be. Generation Alpha may be giving us insights into those new forms. To be successful, the Association for Middle Level Education (2020) articulates five essential attributes that call for schools to be responsive, challenging, empowering, equitable, and engaging. These ideas are just as applicable and just as necessary today as they were when first conceived with Lounsbury's seminal *This We Believe* position paper in 1982. Integrity to the middle school philosophy appears to provide a path for connecting with and teaching this group of adolescents. Simply more incumbent now on classroom teachers is to be willing and able to adapt their instruction for this new cohort, explore their own culture and biases, use techniques that focus on positivity, give students the space, both physically and creatively, to innovate, and to be sensitive to the students' emotions and viewpoints. Teachers must now try to shape skeptical pessimists into productive and trusting critical thinkers (Mitchell, 2023). Keep the focus on initiating contact, expressing caring, providing challenge, and never giving up (Pickhardt, 2017).

Never has it been more important to investigate how both current middle school teachers and the higher education instructors who prepare pre-service teachers for their future classrooms can properly confront this population of students who are rapidly spurring a shift from structural and auditory learning to visual, multimodal, and hands-on methods of receiving instruction (McCrindle, 2021). Outdated methods, once considered standard teacher prep, are simply not adequate or appropriate any longer. Educators can either seize the philosophies and practices that teach, inspire, mobilize, and prepare Gen Alpha, or watch the window of opportunity close on significantly influencing these great minds of our next great generation (Seemiller & Grace, 2017). They are here. Are middle schools ready for "generation glass"?

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Appendix A

The Essential Questions Asked of Middle School Teachers

In which state do you	How many years total	On a scale of 1–10, how tech
currently teach?	have you been a middle	savvy would <i>you</i> consider your
	grades teacher?	Gen Alpha students in terms of
Indiana	0–5	using technology to achieve
Kentucky	6–10	success in their schoolwork?
Ohio	11–15	How tech savvy do you think
	More than 15	Gen Alpha students consider
		themselves in terms of using
		technology to achieve success in their schoolwork?
		their schoolwork?
What positive traits do you	What negative traits do	What sources or platforms do
see that Gen Alpha students	you see that Gen Alpha	you think your Gen Alpha
uniquely bring to your	students uniquely bring to	students use to search for
classroom?	the classroom?	information when doing
		schoolwork?
From your experience with	Given that Gen Alpha	Is humor used in your teaching?
Gen Alpha students, in what	students generally expect	How do Gen Alpha students
ways do they prefer to learn	instantaneous, on-demand	respond to humor in your
content?	answers, have you	classroom?
	modified or changed your	
	assignments or course	
	materials to fit that need?	
Are assignments and projects	What have you seen in	Have anxiety and/or mental
customized/personalized in	Gen Alpha students in	health played a part in your
your classroom? In what	how they work with	classroom with Gen Alpha
way?	others? How about how	students? If so, in what way?
1		1
	they work independently?	