Generation Alpha Students: Connecting, Educating, and Relating

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Abstract

Individuals born between 2010-2025 are considered part of Generation Alpha (McCrindle, 2014). Little is known or written regarding this generation; however, a greater understanding of current knowledge can impact the future of this population. Researching this population's strengths, challenges, and barriers may help with creative strategies for prevention, education, and supporting their future. Teachers, administrators, school counselors, parents, and stakeholders interacting with members of Generation Alpha within the school setting play an integral part in effectively and efficiently providing personalized education and support. This article provides a compilation of current research on Generation Alpha and creative suggestions for educators, administrators, school counselors, and parents. Increasing awareness regarding the role of the school environment in shaping this generation may lead to increased success for all stakeholders.

Keywords: school counseling, technology, child development, teacher effectiveness, Generation Alpha Societal discussion of specific generations (e.g., Baby Boomers, Generation X, Millennials) dates back to the Arthurian Generation in the 1400s, remaining relevant as we understand the specific needs of each generation (Leccardi & Feixa, 2010). Generations Z and Alpha are the more recent generations, including individuals born from 1997 to 2025. McCrindle (2014) stressed that historical events, societal influences, workplace experiences, education, and events, contribute to the ideals and values held by each generation. Understanding these values, ideals, and the impact of current events may help educators, administrators, school counselors, and other educational stakeholders design more effective curricula, instruction, and student support.

dos Reis (2018) wrote, "Today's children are born knowing how to use electronic equipment such as their smartphone, tablet and computer" (p. 11); indeed, this most recent generation is noted for their use of technology. Edwards and colleagues (2016) referred to this generation as *digitods*–the first generation who, from birth, have always had access to online technology. With the opportunity to create solutions to problems (academic, world, or otherwise) using technology (dos Reis, 2018), education and support networks must follow suit. With shared traits like leadership, creativity, and dynamism, this generation seems to favor autonomy; their future careers are more likely to align with influencers, bloggers, and YouTubers than previous generations (dos Reis, 2018). Different futures mean different preparation for said futures–beginning in the school setting.

McCrindle (2014) expressed the difficulty educating Generation Alpha lies in utilizing a nineteenth-century structure with a twentieth-century curriculum when this group of students resides in the twenty-first century. Lang (2020) added the importance of including variables such as sharing similarities when defining societal generations (e.g., excitement, troubles, worries, happiness, apprehensiveness). Expanding our knowledge and awareness of the uniqueness of

Generation Alpha can help bridge the gap between education and support, which has previously worked with modifications for a different group of learners and communicators. Three areas to accomplish this include connecting, educating, and relating to members of Generation Alpha. At the time of this writing, the oldest member of Generation Alpha is likely 13 years old. This young age further exemplifies the sheer amount we have yet to discover regarding the development of this generation and is represented in the suggestions for working with Generation Alpha.

Connection

Global connection is the phenomenon where individuals worldwide are more easily interconnected with the help of methods like the internet and social media. Being connected via technology is this generation's preferred method of communication (Apaydin & Kaya, 2020). Being connected is "central to" Generation Alpha, and they do it primarily in a newer way (Apaydin & Kaya, 2020). McCrindle (2022) stated that Generation Alpha is "more digitally and globally connected than any other generation before them" (p. 1). This statement is a change from the report made by McCrindle in 2014, where he felt Generation Z was the most superior generation on the topic of global connection. This update is significant, considering the oldest member of Generation Alpha was less than five years old at the time.

Authenticity is an integral part of connecting with generation Alpha. When mentioning the connection and entertainment to this generation, Turk (2017) mentioned shows and platforms show casing authentic people and making viewers feel "like you're hanging out with friends" perpetuates viewers to seek similar connections to media and entertainment (p. 16). This reliance on technology for communication and entertainment affects Generation Alpha's ability to make connections face-to-face with actual people (McCrindle, 2014). Observing the characteristics of

Generation Alpha highlights these individuals have minimal in-person interactions with others (Ramadlani & Wibisono, 2017, as cited in Apaydin & Kaya, 2020). McCrindle (2014) highlighted the contradiction between the influx of online connections and starved physical interactions with actual individuals. Apaydin and Kaya (2020) mentioned technology addiction, "high level of perception...wide perspectives towards events...more tendency to violence...egocentric lack of social communication" as some characteristics of this generation (pp. 129-130). These essential positive and negative elements contribute to how they choose to connect. A concern for this group of individuals is the outcome of their lack of physical contact with other individuals once generation alpha reaches their teenage and adult stages of life.

Generation Alpha has the potential to challenge the current K-12 education system and higher education. Yurtseven and Karadeniz (2020) gathered traits that can be challenging for educators to accommodate. Generation Alpha has the propensity to ask more questions, are extroverted, work problems out in their head, and are more technologically advanced. Thomas et al. (2020) stated that they acquire and adapt to new knowledge faster. After all, more information is required as they age, and it is challenging to make quick changes to the educational system. Ziatdinov and Cilliers (2021) mentioned while higher education experiences challenges, they adapt to elements like online learning and new research but need to continue working on things like diversity, so students feel adequately represented. These characteristics and factors pose challenges to the current educational system because while there is some knowledge about their characteristics and values, there needs to be more research on how to get ahead of any current dynamics that could affect them.

Yurtseven and Karadeniz (2020) listed several focus areas crucial for cultivation in this population, which include "learning...communication...technology...life...career...and

workplace skills" (pp. 18-23). An excellent place to start with trying to provide the best education for this group is to understand what they value. They prefer the freedom to make decisions and interact with people like teachers (Turk, 2017; Yurtseven & Karadeniz, 2020). Their values educate those teaching them how tobetter reach them and make a more "quality educational design" (Yurtseven & Karadeniz, 2020, p. 28). Understanding their values also helps us to understand Generation Alpha's character development.

Character Development

We can attribute Generation Alpha's character development to several factors that have changed over time. McCrindle (2014) presented several different educational, working, and relationship elements impacting this generation. Changes in the household regarding individuals' living arrangements and finances affect how Generation Alpha makes decisions and changes to their households and finances. Specifically, there has been a rise in the percentage of couples who cohabitate and those who are married (Manning, 2015; McCrindle, 2014). There are healthcare and mental health concerns about cohabitation's effects on children. Manning (2015) reported recent studies found children who grow up amidst cohabitation may be more susceptible to physical health, behavioral, and cognitive issues. Foran et al. (2022) found after 10-years of observation, children whose families cohabitate are more prone to express their emotions externally. This finding is also essential in Generation Alpha's connection and communication with others. Foran et al. (2022) expressed concern about the theoretical notion that cohabitation produces "emotional insecurity," which could result in "child maladjustment" (p. 7). The family dynamics in which children are raised greatly influences how they decide to interact in relationships with others. This may impact whether Generation Alpha will choose to perpetuate the rising trend of cohabitation or be more interested in marriage. There is currently no data to

predict the impact of divorce on this Generation; however, as the population ages, more information will likely be forthcoming.

Changing educational and workplace environments can also shape the character development of Generation Alpha. McCrindle (2014) highlighted an increase in educated individuals, and more mothers are in the workforce now than ever. Apaydin and Kaya (2020) believed that Generation Alpha has and will become the superior generation regarding education because of how early they begin learning. The current workforce comprises Generation Y (or Millennials), who are and will continue to be the majority parents of the current and unborn generation alpha children. This increase in workforce placement also results in more children being placed in childcare before they reach school age. Observing these factors will help us examine how these elements affect the character, emotional, and social development of t of children whose parents are working more. While this generation is not of working age, Yurtseven and Karadeniz (2020) reported this population "will be the most job-fickle group" (p. 17). Stereotypes like this likely have to do with their characteristics, like needing freedom of choice and not interacting face-to-face (Cirilli et al., 2019). Until Generation Alpha incrases in age, it is difficult to determine the level and effects of parental involvement. Akmal et al. (2019) expressed that with parents competing with social media influencers as the primary role models for children, must recognize their contribution to early stages of learning can help aid "physical and mental development" (p. 88).

Socio-emotional skills like "growth mindset, self-efficacy, self-management, and social awareness" are imperative to the needs of Generation Alpha. Perhaps interruption in this area could be attributed to their dependency on technology which multiple authors have cited as an issue (Apaydin & Kaya, 2020; Cirilli et al., 2019; Drugas, 2022; Januariyansah & Rohmantoro,

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2018; Rusman et al., 2019; Thomas et al., 2020; Ziatdinov & Cilliers, 2021). Socio-emotional intelligence also affects the ability of Generation Alpha to communicate and connect. Akmal and colleagues (2019) provided an example of poor communication and connection by mentioning babies who "fail to thrive" because of the lack of engagement from their caregivers (p. 88). Children who fail to thrive could face persistent developmental issues, which is a significant concern for Generation Alpha because this is a generation whorequires more attention (Apaydin & Kaya, 2020).

Social-Emotional Learning

Akmal et al. (2019) raised concern about the social problem of today's children. Some negative behaviors related to this include acts of violence, bullying, lack of awareness, and emotion regulation. Muhammad et al. (2022) advocated for using and teaching humanist character education (e.g., human potential, cognition, affect, psychomotor) to reverse negative characteristics by focusing on the different aspects that encompass the entirety of each student, like their feelings and capabilities. It is also crucial for individuals to have positive socialemotional development effects, connections with others, and the ability to adapt (Ferreira et al., 2021). Jha (2020) considered that Generation Alpha's reliance on technology is causing "impaired social and emotional well-being" (p. 5). Cirilli et al. (2019) highlighted the Generation Alpha population has a greater tendency to feel lonely despite their immense level of virtual connection, and Demarinis (2020) reported that there is a rise in loneliness (e.g., feelings of being left out, lacking companionship, feeling poorly understood) among Americans, overall. With an increasing rate of loneliness, it is imperative to share information about social-emotional development even more critically. Parents and teachers must teach social-emotional skills early in their development to prevent the effects of loneliness. The amount of social-emotional

development and awareness an individual has also significantly contributes to character development.

Parental involvement may be the main factor in a child developing good socio-emotional skills (Akmal et al., 2019; Ferreira et al., 2021). The research of Akmal et al. (2019) built on the significance of educating teachers and parents about socio-emotional skills and development so they could reinforce these skills in the children for whom they care. This suggestion highlights the importance for children to receive genuine interactions with those who shape them the most, which will then contribute to their character development.

Educating

Interaction and continued experiences with Generation Alpha will allow counselors, educators, and parents to expand and refine their understanding of this population. To fully engage with this population, it is imperative to include consistent learning, reading, and communication to use strengths to support their goals while working through detriments common with this generation. Early research points to the learners of this generation as extroverted, inquisitive, logical, deductive, strategic, metacognitive, creative, and tech-savvy (Conklin, 2012; Eaton, 2018; Turk, 2017).

Educational Design

Further exploration of literature provides methods for increasing the use of technology in the classroom; classroom management; utilizing creativity; evaluating students (Lang, 2020); promoting critical thinking (Beers, 2011); and accessing, evaluating, and managing information found online (Lang, 2020). This shift from previous centuries of curriculum and structure to a twenty-first-century format can be accomplished through several strategies. Lang (2020) suggested six strategies to design this type of learning: assume a "designer teacher role" (p. 24), consider student affect (i.e., motivation, anxiety, emotions, self-efficacy, attitude), meaningful and effective evaluation and assessment, personalized learning, effective use of technology, and interpretation and utilization of student data. Other researchers also incorporate the overall goals of generation alpha into their suggestions.

Ziatdinov and Cilliers (2021) suggested incorporating experiential learning to increase accountability and creativity. With technology at the foundation of this generation, experiential learning assists them with not only accessing but co-creating knowledge and translating information (Ziatdinov & Cilliers, 2021). Nagy and Kölcsey (2017) also prioritized experiential learning, adding the need to interpret the obtained information quickly.

Learning Resources

Early Learners. Early childhood learners begin their educational journey with informal and interactive learning (Rusman et al., 2019). The exploration of creativity has served as a foundation for these early years of learning. However, the definition of what might be entertaining while simultaneously meeting learning objectives has changed. *Edutainment*, or the combination of education and entertainment, draws on the personalized learning approach, which may benefit this generation while incorporating learning and fun (Rusman et al., 2019). According to Rusman and colleagues (2019), there are six main characteristics of edutainment: meaningful learning, entertainment, experiential components, games and play, technology, and places or locations.

Field trips have been part of fun experiences during the first decades of learning. These field trips include opportunities to provide sensory stimulation, psychological development, and fun (Rusman et al., 2019). Field trips offer most, if not all, of the beneficial characteristics of edutainment. Although field trips belong to the location-based portion of edutainment, technology forms another portion. Educators can use television, computer games, and other media to enhance their curriculum (Rusman et al., 2019) and offer edutainment in each learning category for early learners (e.g., formal, informal, non-formal; Rusman et al., 2019).

Playing with toys and games is integral to learning within each learning category. Toys and games are both pivotal and integral to the early years of learning by developing social interactions, physical activity, cognitive development, language development, problem-solving, and pretend play (Davis & Thomas, 2022). Including technology (i.e., apps, smart technology) creates opportunities to blend creativity and technology–two values of this generation (Davis & Thomas, 2022). Science technology engineering and math (STEM) and other digital toys may assist educators in appealing to this generation yet building brick toys still improve things like spatial learning (Davis & Thomas, 2022). Balancing both types of toys is essential to create multiple levels of learning for this generation.

Elementary Learners. Bloom's Taxonomy often coincides with understanding student needs and development (Putri & Umah, 2020). The upper portion of Bloom's Taxonomy represents higher-order thinking, with creation and evaluation at the top. When working with Generation Alpha, recognizing creativity as a strength demonstrates a need to attend to these orders of thinking. One central area of focus involves helping students gain the ability to critically evaluate the information they receive from technology. This evaluation includes the quality and danger inherent in the types of technology they are both accessing and passing on. One other goal for students at the elementary level includes social interactions. Challenges expressed regarding Generation Alpha include competitiveness, sharing, rule-following, and lacking appropriate communication skills (Purnama et al., 2018).

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Learning with Technology. The ever-expanding digital world will create difficulty keeping up with each new resource for the classroom; however, a short list includes: digital storytelling to enhance motivation and ability in writing (Campbell, 2012), augmented reality, 3D animation (Cuendet et al., 2013), eBooks (Ermerawati, 2019; Januariyansah & Rohmantoro, 2018) digital stories (Hamimah et al., 2020), mobile assisted language learning (Ermerawati, 2019), and augmented reality (Arifah et al., 2018). Without learning each new piece of technology, educators may find it helpful to incorporate games students already play at home with their pedagogical methods.

The Four Resources Model (FRM) has been studied with the online game Minecraft (Taylor & Hattingh, 2019). Developed by Luke and Freebody (1999), the skills of the FRM include code breaker, text participant, text user, and text analyst. Combining the technology and creativity of the game with literacy comprehension and application creates a unique method for engaging early learners (Taylor & Hattingh, 2019). The researchers also found that social and mentor integration naturally occurred and worked well with developing real-world connections through a digital platform (Taylor & Hattingh, 2019). Drawbacks of Minecraft include the use of possibly frightening characters (e.g., zombies, evil clowns, scary clowns, evil robots) and additional screen time for this population. Additionally, the game is not currently free of charge.

Challenges With Technology. Technology offers opportunities for students to progress developmentally when writing papers, creating projects, enhancing study skills, and organization; however, these learning resources are fraught with challenges. Although the oldest member of Generation Alpha at the point of this writing is 13 years old, we can predict potential issues with technology based on interaction and research with Generation Z. Computer lock modalities that work to prohibit students from searching online for answers to quizzes or tests

and plagiarism detection programs create issues: Students utilize references in unethical ways– whether this type of utilization is intentional (Singh et al., 2020). Implementing tools (e.g., referencing guides; Singh et al., 2020) to assist students in understanding the appropriate methods for citing their work and reducing points for errors may eliminate some of this problematic utilization. Singh and colleagues (2020) pointed out that the foundational issue of these errors may reside in Generation Alpha students' lack of understanding of the importance of referencing appropriately, considering it unnecessary. This lack poses issues with their subsequent understanding of the methods used to punish these errors (Singh et al., 2020). Recalling the goals, values, and strengths of this generation may be helpful to combat this foundational misunderstanding.

For example, when outlining the methods for properly referencing academic work, guidelines often use "either do this or suffer that penalty," leading students to feelings of "hostility and resentment" (Singh et al., 2020, p. 127)—walking students through the appropriate methods for referencing, while answering the important questions of *why* and *how* can improve their understanding. Cultural differences (i.e., mimicking the work of another can be a sign of appreciation) should also be noted (Singh et al., 2020). Drawing on the creativity of this generation by allowing them to appropriately reword and summarize research may be helpful. Practicing this creative use of writing may be an effective classroom activity. Singh and colleagues (2020) found the use of practice sheets, online referencing tests, and oral practice of paraphrasing and synthesis may help combat multiple areas of challenge while utilizing the strengths of this population.

Relating

Social Emotional Learning

According to the American School Counselor Association (ASCA) Code of Ethics (2010), students have a right to a school which promotes social/emotional development. Akmal and colleagues (2020) suggested Generation Alpha students may find the use of play and games to be helpful with this development; however, Apaydin and Kaya (2020) warned of issues concerning allowing games to include violent video game play. For preschoolers, a group of students recognized for play, adding storybooks with pictures has been shown to teach morals, character, and values (Turan & Ulutas, 2016). Engliana and colleagues (2021) agreed with the use of books, adding the concept of storytelling to increase social/emotional development. While the members of this generation are recognized for their love for technology, Gottschalk warns of the use of social media as a coping mechanism (2019).

Digital Skills

Each generation views and interacts with the word differently, and these differences will affect how they use technology (Cirilli et al., 2019). According to a literature review performed by Cirilli and colleagues (2019), Generation Alpha spends more time on their devices interacting with friends virtually rather than in social settings, including family settings. Despite this lack of familial connection, Generation Alpha is more likely than previous generations to remain in the home, as it is anticipated they are more likely to attend schooling post-high school. Cirilli and colleagues (2019) cautioned that as Generation Alpha transitions into adulthood, their independence may be delayed (2019). Because Generation Alpha spends more time on devices, a pattern of hyper-connectivity through social media has emerged, leading some researchers to believe this generation is dependent on technology and screen time (2019).

The Silent Generation, Baby Boomers, and Generation X are most likely to understand the basics of technology and use them for tasks like email, checking news outlets, and searching for information and products. Of these three generations, Generation X is the most proficient in using technology but does not centralize life around it; instead, they see technology as an aid (Cirilli et al., 2019). Millennials, Generation Z, and Generation Alpha are found to have centralized their lives around technology, with the younger generation being the most proficient and diverse in their use of technology (2019). Generation Alpha children are increasingly able to use the basic functions of devices before they can walk or talk (2019).

Technology Use

A commonality between Silent Generation, Baby Boomers, Generation X, Millennials, Generation Z, and Generation Alpha is they all agree on the usefulness and connectivity of recent technological developments (Cirilli et al., 2019). The six generations start to differ in beliefs about the purpose of technology and their approaches to using it (2019). According to Cirilli and colleagues (2019), the Silent Generation is most likely to use technology to replace other items, such as using a cell phone instead of a landline or a computer to send emails instead of a pen and paper for letters. Baby Boomers typically use devices to search for items to learn about them, not purchase them (2019). Baby Boomers will also use technology more than the previous generation to contact friends and family. Generation X are more likely than previous generations to own more devices and use them to browse the internet for news and information (2019). Through their meta-analysis, Cirilli and colleagues (2019) found that as age decreases through the generations (Millennials, Gen Z, and Gen Alpha), the number of hours spent on devices and the internet increases. The age of first technology usage is decreasing through these generations (2019).

Since the creation and rise of social media, studies have examined the negative impact on children and adolescents. Many children and adolescents have accounts on multiple different

social media platforms to seek social acceptance (Gottschalk, 2019). Multiple platforms have led to increased concern about "extreme or excessive" use of the internet and social media (2019, p. 20). There have been studies into the changing brains of youth because of the overuse of social media and its addictive potential (2019). Other studies have also found a link between social media use and poor sleep, anxiety, depression, overeating, and other physiological problems (Christakis et al., 2004; Gottschalk, 2019; Obel et al., 2004; Woods & Scott, 2016).

The usage of social media and technology can be dangerous for all generations. Regarding Generation Alpha, children could be targeted by child predators and cyber-bullying. The United Nations International Children's Emergency Fund (UNICEF; 2017) details the three categories of digital risks: content, contact, and conduct. Digital content risks include "unwelcome and inappropriate content," such as sexual and violent images, racist or discriminatory content, and websites promoting dangerous behaviors or exploitative advertisements (2017, p. 72). Digital contact risks include potentially unsafe communication (2017). Through technology, child predators could gain access to children without the need to be physically present, which could allow them to acquire information without parental knowledge (Davis & Thomas, 2022).

Furthermore, these adults could ask for sexual content or encourage dangerous behaviors (United Nations International Children's Emergency Fund, 2017). Digital conduct risks include behaviors children exhibit that contributes to content or contact risks, such as posting hateful speech or sexual images (2017). Educating children about such risks is critical as technology use increases. Yurtseven and Karadeniz (2020) listed skills for teachers that could help children learn digital safety and responsibility: "assuming a 'designer teacher' role, considering affective factors, assessing meaningful learning, providing personalized learning experiences, using

technology effectively, and interpreting data (pp. 24-27). Furthermore, the International Society for Technology in Education (ISTE) lists standards for students regarding digital life. These include: leveraging technology, recognizing responsibility, constructing knowledge through digital tools, using a variety of tools to solve problems, developing and employing strategies for problem-solving, clear communication through technology, and broadening their perspectives through technology (ISTE, 2023) These seven standards could be applied to all children to create safer interactions on the internet (ISTE, 2023).

Screenagers

Generation Alpha may have been termed by McCrindle (2014), but the group born between 2010 and 2025 has also been called *screenagers* or the *wired generation* (Ziatdinov & Cilliers, 2021). There are many similarities between Generation Z and Generation Alpha, including being born into a world with the internet and devices with applications (apps) designed to facilitate fun, communication, learning, and work (Drugas, 2022). Some differences include earlier use of technology in education for Generation Alpha, more content creation for Generation Alpha, and more of a basic understanding of how technology and devices work compared to Generation Z (Drugas, 2022). Ziatdinov and Cilliers (2021) predicted one in two Generation Alpha children will obtain higher education and pursue cyber- and digital-related careers. Drugas (2022) posited that Generation Alpha could use technology to engage in multiple jobs simultaneously. Although Generation Alpha is curious about and creative with the use of technology, they are described as more impatient and self-centered than Generation Z (Bonchis, 2022, as cited in Drugas, 2022). A lack of relational and communication skills, a sense of responsibility, and compassion and thoughtfulness toward others are other critical qualities missing from Generation Alpha (Selvi et al., 2022).

Implications

Members of Generation Alpha will continue to join the world at a rate of approximately 2.5 million individuals per week until the year 2025 (McCrindle, 2014). Therefore, we have yet to see the development of strengths and challenges of this population beyond the age of 13. How will they best learn in high school and as adults? How will they navigate careers and change the look of the workplace as we know it? How will they communicate, relate, and connect differently?

One noticeable occurrence throughout this review of research includes the study of this generation across the globe, with studies conducted and published by the US needing to catch up. The education system has experienced a dramatic shift since 2020, with increased use of technology necessary due to Covid-19. Educators need help navigating the previous curriculum with what is most effective with newer generations of students. Time constraints, budgeting, and a focus on testing results impact the ability of educators to meet this need to incorporate newer technology into their classrooms (Ziatdinov & Cilliers, 2021). How, then, will we adequately meet the needs of Generation Alpha?

While we currently may hold more questions than answers, continuing to study and compile data from this generation will allow us to shift as necessary. Research should focus on not just the use of technology but also reverse mentoring (e.g., teachers flip the mentoring process by allowing students to provide mentorship on the teacher's communication styles, classroom management, and so forth; Bozak, 2021), ways to assist educators without adding burden, improving communication styles of the generation, and relating and connecting to this population in ways that draw from their strengths while helping them overcome the challenges posed by a rapidly changing world (Cirilli et al., 2019).

As members of Generation Alpha grow and change, so must our understanding of their ideals, behaviors, and values. While we do not know what world events will occur between the time of this writing and 2025 (when no new individuals will be born into this generation and a new generation will begin), we can expand our awareness through observation, experience, and research. Supporting Generation Alpha must become a priority–just as the generations before them did for each generation that followed.

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