

Generation Z

Approaches and Teaching–Learning Practices for Nursing Professional Development Practitioners

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Nursing professional development (NPD) practitioners have complex, multifaceted roles that require skills to effectively guide, support, and develop nursing staff and meet their learning needs. NPD practitioners acting as mentors, change agents, leaders, champions, and advocates are responsible for onboarding, orientation, continued competency, and professional development of new and existing nursing staff (Di Leonardi, 2017). They also facilitate learning and can positively impact staff, organizations, and ultimately patients. NPD practitioners have typically employed educational approaches, such as the passive, lecture-style nursing orientation model (Bishop & Wackler, 2017; Culley et al., 2012; Green, 2016; Kennedy, Nichols, Halamek, & Arafeh, 2012). These traditional delivery methods may not be optimal in addressing gaps in knowledge, skills, or practice. Despite a call for innovative, active approaches and teaching–learning practices, not many changes have been made in NPD (Buchwach & Hill, 2017; Culley et al., 2012; Green, 2016; Kennedy et al., 2012). Further compounding these educational delivery issues is the diverse generational workforce in healthcare settings. In the past, NPD practitioners needed to address the learning needs of multiple generations, including Baby Boomers, Generation X, and Generation Y or Millennials (Bishop & Wackler, 2017). However, a new generation, Generation Z, those born between the mid-1990s and ending around 2012 (Seemiller & Grace, 2016; Shatto & Erwin, 2016; Turner, 2015; Twenge, 2017), is beginning to enter the nursing workforce. Generation Z has some similarities with Millennials, the immediately preceding generation, such as their technologically savvy nature, but Generation Z also possesses important differences. Generation Z's unique characteristics will further challenge NPD practitioners and necessitate changes in approaches and

teaching–learning practices to provide the most effective development initiatives and approaches.

Each generation is influenced by the prevailing economic, social, and cultural conditions, which in turn contribute to the unique aspects and needs of the group (Rickes, 2016; Seemiller & Grace, 2016). Generation Z has grown up in times of uncertainty and change, having been influenced by the explosion of technology and digital devices, economic instability, and safety insecurities (Rickes, 2016; Seemiller & Grace, 2016; Turner, 2015; Twenge, 2017; Wiedmer, 2015). In addition, they have been raised by skeptical and pragmatic parents, resulting in a cautious generation (Rickes, 2016; Seemiller & Grace, 2016; Shatto & Erwin, 2016, 2017; Twenge, 2017; Wiedmer, 2015). This article describes the attributes of Generation Z identified in the current literature and outlines specific approaches and teaching–learning practices suggested for NPD practitioners in guiding, supporting, and developing nursing staff.

Generation Z Attributes and Cautions

Attributes

Generation Z includes those born from 1995 to around 2012 (Seemiller & Grace, 2016; Shatto & Erwin, 2016; Turner, 2015; Twenge, 2017); however, authors disagree on exact Generation Z cutoff dates. As literature continues to emerge on this group, exact dates may be refined. The beginning of this generation, 1995, aligns with the approximate time the World Wide Web became publicly available. Thus, this group has never known a time without the Internet, making them the true digital natives (Igel & Urquhart, 2012; Loveland, 2017; Rickes, 2016; Seemiller & Grace, 2016; Shatto & Erwin, 2016, 2017; Spears, Zobac, Spillane, & Thomas, 2015; Turner, 2015; Twenge, 2017; Wiedmer, 2015). Generation Z represents nearly a quarter of the U.S. population (Twenge, 2017; Wiedmer, 2015), and they will emerge as a substantial group in the workforce, particularly as Baby Boomers retire. They are known by varying names, which include Generation Z, iGen, net Generation, iGeneration, Gen Next, Gen Tech, Gen Wii, Post Gen, and Plurals (Igel & Urquhart, 2012; Seemiller & Grace, 2016; Turner, 2015; Twenge, 2017; Wiedmer, 2015). For ease of reading, they will be referred to as Generation Z throughout this article.

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The inescapable influence of technology during Generation Z's life has led to regular and avid consumers of the digital world and reliance upon technology for knowledge curation, communication, and interaction (Igel & Urquhart, 2012; Loveland, 2017; Rickes, 2016; Seemiller & Grace, 2016; Shatto & Erwin, 2016, 2017; Spears et al., 2015; Turner, 2015; Twenge, 2017; Wiedmer, 2015). This group is virtually tethered to digital communication, spending approximately 9 hours per day on their smartphones alone (Shatto & Erwin, 2016, 2017). As a result, this generation demonstrates underdeveloped social and relationship skills, placing them at risk for isolation, anxiety, insecurity, depression, and other mental health concerns (Igel & Urquhart, 2012; Seemiller & Grace, 2016; Spears et al., 2015; Twenge, 2017; Wiedmer, 2015). Members of Generation Z also make constant comparisons with their peers on social media, which can aggravate their feelings of inadequacy (Twenge, 2017). In addition, this generation is accustomed to constant stimulation from technology, and they have demonstrated short attention spans (Loveland, 2017; Seemiller & Grace, 2016; Shatto & Erwin, 2016, 2017; Twenge, 2017; Wiedmer, 2015).

Generation Z has grown up in times of emotional, physical, and financial instability (Rickes, 2016; Seemiller & Grace, 2016; Turner, 2015; Twenge, 2017; Wiedmer, 2015). Public violence and economic uncertainty have led to pragmatic, cautious, and concerned individuals who are likely to take fewer emotional, physical, and financial risks than previous generations (Loveland, 2017; Rickes, 2016; Seemiller & Grace, 2016; Shatto & Erwin, 2016, 2017; Turner, 2015; Twenge, 2017; Wiedmer, 2015). This cautious nature has led to a generation of sedentary activists (Twenge, 2017; Wiedmer, 2015). In other words, Generation Z would prefer to post a message on social media regarding an event versus actively participating. Favorably, Generation Z represents an open-minded and diverse population who are comfortable with differences (Loveland, 2017; Seemiller & Grace, 2016; Shatto & Erwin, 2016, 2017; Turner, 2015; Twenge, 2017; Wiedmer, 2015). They have grown up without times of segregation and have trouble understanding how or why racism still exists (Twenge, 2017). Figure 1 lists the nine Generation Z attributes identified in the current literature (Igel & Urquhart, 2012; Loveland, 2017; Rickes, 2016; Seemiller & Grace, 2016; Shatto & Erwin, 2016, 2017; Spears et al., 2015; Turner, 2015; Twenge, 2017; Wiedmer, 2015).

Though Millennials are also technologically savvy, Generation Z members are the true digital natives, as they have not known a time without the Internet (Igel & Urquhart, 2012; Loveland, 2017; Rickes, 2016; Seemiller & Grace, 2016; Shatto & Erwin, 2016, 2017; Spears et al., 2015; Turner, 2015; Twenge, 2017; Wiedmer, 2015). Millennials grew up in different times and with different parents raising them; Millennials were encouraged to accomplish anything they wanted to (Wiedmer, 2015). In uncertain times and with

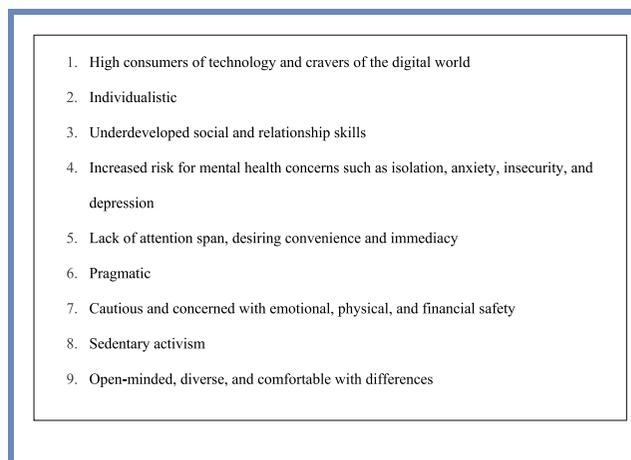
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1. High consumers of technology and cravers of the digital world
 2. Individualistic
 3. Underdeveloped social and relationship skills
 4. Increased risk for mental health concerns such as isolation, anxiety, insecurity, and depression
 5. Lack of attention span, desiring convenience and immediacy
 6. Pragmatic
 7. Cautious and concerned with emotional, physical, and financial safety
 8. Sedentary activism
 9. Open-minded, diverse, and comfortable with differences

FIGURE 1 Nine Generation Z attributes identified from the literature.

skeptical parents, Generation Z has become more pragmatic, cautious, and concerned than their confident, achieving Millennial counterparts (Twenge, 2017; Wiedmer, 2015). Generation Z is less likely to take risks than Millennials and is more likely to have a back-up plan or options (Twenge, 2017). NPD practitioners must recognize and consider the attributes and differences in Generation Z as they work to alter approaches and teaching-learning practices to adequately guide, support, and develop nursing staff.

Cautions

Literature regarding Generation Z is still emerging (Twenge, 2017), with Generation Z members just beginning to enter the nursing workforce. Thus, NPD practitioners are only starting to learn about this generation, and limited rigorous research about generational cohorts is available. Attention will be needed as additional data emerge regarding this generation. It is also important to mention that generational conversations are stereotypical in nature and the attributes identified are based on averages (Philip & Garcia, 2013; Seemiller & Grace, 2016; Twenge, 2017). In other words, not all members of Generation Z will align with these generalizations (Philip & Garcia, 2013; Seemiller & Grace, 2016; Twenge, 2017). It is also notable to mention that generational definitions are ambiguous, and authors disagree on exact generation dates. In addition to authors disagreeing on cutoff dates, many authors question the merit of dividing individuals into generational cohorts altogether (Bump, 2015), given the complex nature of individuals and society. Though discussions of generations begin conversations, these discussions should never replace careful assessments. Attention to particular individuals, settings, organizations, and contextual factors is needed to optimally guide, support, and develop nursing staff. Furthermore, NPD practitioners will work with diverse learners, so using a variety of approaches and teaching-learning practices is advisable.

Planning and Sustaining Change to Reach Generation Z

As Generation Z enters the nursing workforce, they represent a substantial change in the healthcare environment. Change is a dynamic, complex, and unfolding process that can be met with fear, conflict, and resistance if not planned for and nurtured throughout (Rosa, 2017). NPD practitioners are instrumental change agents that will be actively involved in planning appropriate approaches and practices to reach Generation Z. To help NPD practitioners successfully lead and sustain the change, use of a theory can help structure the changes needed to guide, support, and develop Generation Z nursing staff. Rogers' change model, for example, details the phases (a) knowledge, (b) persuasion, (c) decision, (d) implementation, and (e) confirmation and may be useful to structure and support the changes needed to reach Generation Z (Rosa, 2017). Knowledge regarding Generation Z attributes can be communicated to organizational leadership through existing meetings and planning activities. Communication to emerging leaders within the organization, such as charge nurses and preceptors, is also recommended. These discussions will help develop relevant and timely approaches and initiate changes in teaching–learning practices. NPD practitioners may also perform analyses of current approaches, teaching–learning practices, and organizational resources to identify gaps and plan for implementation of Generation Z strategies. Organizational leaders will likely be persuaded of the urgent need for change revealed by these analyses when considering Generation Z attributes.

In addition to helping plan for the change, NPD practitioners will also help facilitate the change by providing vigilant attention throughout the process (Rosa, 2017). While acting as champions and role models, NPD practitioners can also coach organizational leaders when they implement Generation Z approaches and teaching–learning practices. In addition, monitoring the changes can reveal successes and areas for improvement. Data can be gathered through evaluations of, for example, orientation, staff education, preceptors, and unit leadership; these data can help inform alterations needed in approaches and practices. NPD practitioners will help plan and sustain necessary changes needed in guiding, supporting, and developing Generation Z. The next section offers specific approaches and teaching–learning practices suggested based on generational characteristics. Notably, though these strategies will be especially valuable in reaching Generation Z, there is evidence to support their use with other generations.

Generation Z Approaches and Teaching–Learning Practices

Approaches

Considering identified Generation Z attributes, several general approaches are suggested for NPD practitioners in

guiding, supporting, and developing nursing staff. Generation Z is cautious and concerned with emotional, physical, and financial stability (Loveland, 2017; Rickes, 2016; Seemiller & Grace, 2016; Shatto & Erwin, 2016, 2017; Turner, 2015; Twenge, 2017). Favorably, this means Generation Z wants a stable work position and will likely be more loyal workers than Millennials (Seemiller & Grace, 2016; Twenge, 2017). However, their cautious nature means Generation Z is not sure that they will succeed and will take fewer risks versus previous generations (Twenge, 2017). NPD practitioners need to provide a nurturing and reassuring environment for Generation Z (Seemiller & Grace, 2016; Twenge, 2017). Encourage staff in all interactions and be sure to give frequent feedback to build confidence (Seemiller & Grace, 2016; Twenge, 2017). Bearing in mind Generation Z's lack of attention span and cautious nature, provide short, succinct, and prompt feedback (Seemiller & Grace, 2016; Twenge, 2017). Inspiring some risk, such as completing a voluntary professional development course or returning to graduate school, is important for Generation Z to move out of their safety zones. In addition, allowing Generation Z workers small career leaps (Twenge, 2017), such as acting as a preceptor for students, can help instill and cultivate confidence.

Though Generation Z tends to respect authority and existing hierarchies, their pragmatic, cautious, and concerned nature means they will also want to be involved in the organization (Seemiller & Grace, 2016). Listen to Generation Z, considering and valuing their opinions and perspectives (Seemiller & Grace, 2016). As appropriate, involve nurses in decision-making processes (Seemiller & Grace, 2016). This will help increase confidence in Generation Z. It is also important to be transparent with Generation Z, as they will desire honest and communicative NPD practitioners.

Other general approaches for Generation Z relate to their underdeveloped social and relationship skills and their risk for mental health concerns (Igel & Urquhart, 2012; Seemiller & Grace, 2016; Spears et al., 2015; Twenge, 2017; Wiedmer, 2015). Group and interpersonal interactions may need to be facilitated by NPD practitioners. Explaining and demonstrating proper group and interpersonal skills, such as active listening, providing constructive criticisms, and respecting others' perspectives, can help increase social and relationship skills. When providing education, consider including activities that require short bursts of social interactions to help cultivate this skill in Generation Z workers. Encourage Generation Z to engage in behaviors that promote health. The generation's technology dominance can be detrimental to their emotional and perhaps even physical health (Igel & Urquhart, 2012; Seemiller & Grace, 2016; Spears et al., 2015; Twenge, 2017; Wiedmer, 2015). Suggesting strategies for self-care and limiting screen time (Twenge, 2017) can help Generation Z's risk for health concerns. Providing

guidance about appropriate technology use during work hours may also be needed. Lastly, reminding staff about social media policies will prevent inappropriate postings that could violate patient confidentiality and privacy and jeopardize employment.

Teaching–learning practices

In addition to general approaches, several teaching–learning practices are offered to help guide, support, and develop Generation Z. First, innovative onboarding and orientation models are suggested. For over 60 years, nursing onboarding and orientation has typically included passive, lecture-style models where learners experience “information overload” from a succession of speakers regarding organizational policies, procedures, and regulatory matters (Bishop & Wackler, 2017; Culley et al., 2012, p. 46; Green, 2016; Kennedy et al., 2012). Hours of training for medical record and/or technology systems are also usually included (Culley et al., 2012; Green, 2016; Kennedy et al., 2012). In addition, a few required competencies and/or skill validations often occur (Culley et al., 2012; Green, 2016; Kennedy et al., 2012). Considering the identified Generation Z attributes and adult learning principles, this traditional model is not optimal for capturing learners’ attention. NPD practitioners can instead use innovative models, such as interactive online modules combined with a “day in the life” (Kennedy et al., 2012, p. 26) comprehensive simulation. Using interactive online modules detailing essential policies, procedures, regulatory matters, and medical record and technology systems would appeal to the technologically inclined, individualistic Generation Z staff member. Practice and validation of the day in the life comprehensive simulation would engage learners and confirm understanding of module information and required competencies and skills.

In addition to altering onboarding and orientation models, reimagining staff education will also help guide, support, and develop Generation Z. Utilizing technology and visually based materials can help engage Generation Z. Using free systems, applications (apps), programs, and platforms, NPD practitioners could create explanatory videos, a video-sharing website channel, games, concept maps, questioning and feedback exercises, and infographics. For example, an NPD practitioner could create short videos for a video-sharing website channel called “What’s New in the ICU” to detail unit changes, for example, new supplies or policies that impact nursing staff. As another example, NPD practitioners could create a simple infographic using graphic programs to communicate straightforward changes or to advertise upcoming inservice education. These infographic presentations can highlight critical learning points through a visual presentation and thereby aid in comprehension for these visual learners. Reimagined staff

education can also work to cultivate social and relationship skills. Short group-based activities supplemented with technology, such as clinical case scenarios, in-the-basket problem-solving, gallery walks, or peer coaching, will help engage Generation Z and cultivate needed group and interpersonal skills. A gallery walk, for example, is an active teaching–learning strategy that involves small group discussion (Buchwach & Hill, 2017). Learners are divided into small groups and assigned a topic or problem. A free brainstorming app could organize the group’s thoughts regarding their assigned topic or problem. At the end of a designated time frame, usually 5 minutes, groups rotate to view and discuss other groups’ work and add additional information. The NPD practitioner monitors and encourages proper group interactions, while asking probing questions and identifying key discussions to highlight during the debriefing process. After learners have moved through all other groups’ topics or problems, the NPD practitioner debriefs key concepts and ideas (Buchwach & Hill, 2017). Short group-based activities, such as a gallery walk, augmented with technology can help engage Generation Z while developing their group and interpersonal skills.

Creative, evidence-based methods for competency and skill validation can also help guide, support, and develop Generation Z. Various technology-enhanced evidence-based competency and skill validation methods, such as virtual simulations, standardized patients with task trainers, peer reviews, discussions, exemplars, and rubrics, can develop Generation Z’s group and interpersonal skills, increasing connection and thereby decreasing the generation’s risk for health concerns. Technology augmentation helps engage Generation Z and ensures achievement of competency and skills. As an example, NPD practitioners could have nursing staff complete peer reviews electronically. Or electronic discussion groups could use social media or other platforms to help nurses review and deliberate about various nursing care topics. Technology-enhanced options will help to capture attention and maintain interest of Generation Z nurses. Other ways to capitalize on technology and visual learning of Generation Z might involve use of gaming activities that can convey information or allow practice of content. Incorporating leader boards and the awarding of digital badges when skills or competencies are achieved can also enhance the social aspect desired and needed by these learners. Electronic audience response systems can engage participants,—encourage problem solving and their consideration of content while providing opportunities for NPD practitioners to assess learning and provide instant feedback. Also, to address Generation Z’s pragmatic nature (Loveland, 2017; Rickes, 2016; Seemiller & Grace, 2016; Shatto & Erwin, 2016, 2017; Turner, 2015; Twenge, 2017; Wiedmer, 2015), consider ensuring competency and skill through evidence in daily work or just-in-time validations.

Notably, as champions of scientific inquiry (Di Leonardi, 2017), NPD practitioners will need to consider Generation Z's technology saturation and the amount of information available today (Igel & Urquhart, 2012; Loveland, 2017; Rickes, 2016; Seemiller & Grace, 2016; Shatto & Erwin, 2016, 2017; Spears et al., 2015; Turner, 2015; Twenge, 2017; Wiedmer, 2015). Nursing staff may be adept at locating information but may need help with learning information literacy skills that will enable them to evaluate the variety

of sources available (Wiedmer, 2015). In other words, learners may need tutorials in determining digital source credibility, relevance, and accuracy when obtaining resources for evidence-based practice, research, and/or quality improvement projects.

Despite the fact that Generation Z will require changes in approaches and teaching-learning practices, such as using technology in staff interactions, NPD practitioners need to also employ adult and active learning principles.

- ✓ Innovate onboarding and orientation models
 - Interactive online modules combined with a day in the life comprehensive simulation
 - Flipped classroom models
- ✓ Reimagine staff education
 - Videos created using programs such as Powtoon or Educreations
 - NPD practitioner created YouTube channel
 - Gamification using electronic templates
 - Digital badging and leader boards
 - Concept mapping or mind mapping using programs such as VUE, Inspiration, or Bubbl.us
 - Questioning and feedback gathered through electronic audience response systems, applications (apps), and platforms such as emojis, Socrative, Kahoot!, and Poll Everywhere
 - Infographic in-service flyers or to communicate straightforward changes using programs such as Canva
 - Case scenarios and/or unfolding case scenarios supplemented with technology such as videos
 - In-the-basket or in-the-box problem-solving supplemented with technology such as videos; ideas gathered through apps such as iBrainstormer
 - Gallery walk ideas gathered through apps such as iBrainstormer
 - Coaching and peer coaching supplemented with technology such as videos
 - Virtual simulations
- ✓ Cultivate continued competency and skill validation through creative, evidence-based, and often technology-enhanced methods
 - Virtual simulations, mock codes, mock trials, mock surveys, or role play
 - Standardized patients with task trainers
 - Electronic peer reviews
 - Discussion and reflection groups using social media or other technology platforms
 - Exemplars supplemented with technology such as videos, diagrams, or infographics
 - Electronic rubrics
 - Evidence in daily work or just-in-time validations
- ✓ Utilize adult and active learning principles
 - Relevance and real-life examples
 - Cognitive effort
 - Multiple strategies with a few technology platforms
 - Conducive learning environment including cultivating an open, safe, supportive, respectful, and collaborative environment
 - Short bursts of teaching
 - Self-directed activities
 - Collaborative problem solving

FIGURE 2 Teaching-learning examples for the nursing professional development practitioner to guide, support, and develop Generation Z nursing staff.

Technology will not replace effective learning facilitation practices such as ensuring relevance, requiring cognitive effort, utilizing multiple strategies, cultivating a conducive learning environment, and providing short bursts of teaching. These principles are essential in reaching any generation, but these strategies will certainly appeal to Generation Z learners. Figure 2 summarizes and provides NPD practitioners with specific examples of teaching–learning practices to guide, support, and develop Generation Z nursing staff (Bishop & Wackler, 2017; Buchwach & Hill, 2017; Carter, Creedy, & Sidebotham, 2016; Culley et al., 2012; Frentsos, 2013; Green, 2016; Holtschneider, 2017; Jeffrey & Jarvis, 2014; Jeffrey, Longo, & Nienaber, 2016; Kennedy et al., 2012; Merriam & Bierema, 2014; Phillips, 2016; Seemiller & Grace, 2016; Shatto & Erwin, 2016, 2017; Twenge, 2017; Wright, 2005).

CONCLUSION

Nine attributes of Generation Z were identified in the current literature, including (a) high consumers of technology and cravers of the digital world; (b) individualistic; (c) underdeveloped social and relationship skills; (d) increased risk for mental health concerns such as isolation, anxiety, insecurity, and depression; (e) lack of attention span, desiring convenience and immediacy; (f) pragmatic; (g) cautious and concerned with emotional, physical, and financial safety; (h) sedentary activism; and (i) open-minded, diverse, and comfortable with differences (Igel & Urquhart, 2012; Loveland, 2017; Rickes, 2016; Seemiller & Grace, 2016; Shatto & Erwin, 2016, 2017; Spears et al., 2015; Turner, 2015; Twenge, 2017; Wiedmer, 2015). Times of uncertainty and explosions in technology and parental influences have impacted this generation. These generational attributes identified are just beginning to affect NPD practitioners and the nursing workforce but will continue to require attention to meet learning needs of this generation.

New approaches and teaching–learning practices are needed as Generation Z nursing staff continue to enter the workforce. NPD practitioners are vital change agents who can facilitate these changes and ensure successes. NPD practitioners need to provide nurturing, reassuring environments where they provide feedback and transparency and listen to, consider, and value Generation Z perspectives. Encouraging and facilitating healthy behaviors through social and relationship skills is advised. Teaching–learning practices must also be redesigned to effectively guide, support, and develop Generation Z. Redesigning onboarding and orientation models, staff education, and competency and skill validations using technology and adult and active learning principles will help reach Generation Z. Safeguarding proper scientific inquiry by teaching information literacy is also vital for this digitally native generation. Though data regarding this generation is still emerging with Generation Z just beginning to enter the nursing workforce, discussing Generation Z

influences and attributes can assist NPD practitioners in fulfilling their complex roles; successfully guiding, supporting, and developing nursing staff; and positively impacting staff, organizations, and ultimately patients.

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