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# TEACHING THE NEW GENERATION OF NURSING STUDENTS- DIFFICULTY OR CHALLENGE?

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## Abstract

In line with the technological changes that have taken place in recent decades in the education field, educators are committed to developing tailor-made skills for the 21<sup>st</sup> century and address generational characteristics of the new learners; Generation Y and Generation Z. The purpose of this paper is to present a review regarding generation gaps among the new learners with focus on the nursing student population and review an overview of various teaching methods and models tailored to students of different generations in a technology-rich environment that requires dealing with complex medical conditions. Key issues identified include the need to carefully prepare and design new learning strategies in the digital age. With the changes in technology, the traditional model no longer provides a sufficiently effective learning method. The change should be reflected in teaching style and upgrade of the student learning experience so that it will be interactive meaningful and relevant. The paper concludes that whilst adjust different teaching methods and employ innovative teaching strategies, it is also important to focus and address the diversity and intergenerational gap of the new learners that can contribute meaningful professional nursing education in the future to come. There is therefore scope for further research in this area, focusing on generation Z and facing the challenge towards generation Alpha, which is expected to be more educated and entrepreneurial than his previous generations.

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## 1. Introduction

Many countries address today the human capital crisis in the health system. This crisis pertains to dimensions of availability, accessibility, quality and caregiver staff efficiency. This crisis occurs alongside global constraints, such as: aging population, rising chronic morbidity, rising demand for health services in developed countries, accelerated development of medical technologies, migration of medical personnel and a global trend to reduce health inequalities.

According to a World Health Organization's report (Economics of health System, WHO, 2018), there will be a shortage of 18 million health systems' workers worldwide by 2030. The shortage blocks demand for health services and harms countries' social economic growth. One of the solutions for coping with this challenge is the large-scale recruitment of nursing students who will be trained to the role of nurse in the 21st century and integrated as a vital workforce in the healthcare system.

In line with the changes that have taken place in recent decades in the education system in Israel and around the world, nursing educators are committed to developing tailor-made skills for the 21st century and address generational characteristics of nursing students (Generation Y and Generation Z) while addressing the needs of intergenerational characteristics - employment variety and professional development, wages, working conditions and standards, employee mobility between the public and private sectors and staff retention in the public healthcare system.

In light of generation gaps among nursing students and changes in teaching and learning trends, there is a need to redefine teaching methods and strategies. This article presents an overview of various teaching methods and models tailored to students of different generations in a technology-rich environment that requires dealing with complex medical conditions.

The current review will focus on the two major nursing students' generations as while the Y generation members (1976-2000) are characterized as capable of multi-tasking, vigorous and seeking challenges, striving to influence others and generate change, Generation Z (2000-2010) now joining the employment market, are individualists who are fully connected to social networks. The review will also try to address the gap between learners and educators and propose suitable methods for the new generation of learners.

## 2. Literature Review

In light of the constant increase in the number of nursing students, the education systems are required to cope with a variety of learners at different ages. Thus, in Israel in 2019, 66% of the nursing students were 29 years old and under (Generation Z), 30% were 30-44 years old (Generations X and Y) and the remaining 4% were 45 and older (Baby Boomers) (Israeli Ministry of Health, 2019). This indicates a new students generation, Generation Z, that are enrolling in undergraduate nursing education programs on their way to joining the nursing profession (Israeli Ministry of Health, 2020).

Moreover, the rapid technological revolution, the Internet, the knowledge base and the social networks have influenced methods of education, and ways of learning and teaching. Frontal lecture are no longer enough for many students, as imparting facts and information in class is not a learning process in their view. These gaps between the generation of new learners and the generation of teachers and lecturers

are an obstacle to imparting 21st century skills, and it is important to acquaint teaching staff with new students' profile and their ways of thinking (Akçam Yalçın & Izgi, 2014).

## **2.1. Generational Gaps**

Generational gaps refer to differences in opinions, beliefs, and values between one generation and another. Traditionally, the concept 'generation' is defined biologically and refers to the time that elapses between the birth of parents and the birth of their children. This definition refers to age differences (Subramanian, 2017), but though it has served sociologists well in the past, it is no longer relevant. Hence, generational gap is defined sociologically rather than biologically.

Additional researchers adhere to the traditional generation gaps: Builders/Traditional generation (mid 1920 - mid 1940), baby boomers' generation (mid 1940 – 1960), generation X (1960-1980), generation Y (1980-1999), generation Z (2000-2010), generation alpha - the youngest generation, including those born in 2010 onwards (McCrinkle, 2009).

A generation is defined as a group of people that were born in the same period of time, molded by the same events at certain points in time and influenced by the same social markers, or to put it differently, a cohort united by age and life stage, conditions and technology, events and experiences (McCrinkle, 2014).

Each generation has common characteristics, values, and expectations (Walker et al., 2006), shaped by global events, technology, communication, and family influences (Lipscomb, 2010). All of these are likely to be reflected in the diverse values and priorities in professional development and various preferred learning styles (Tolbize, 2008).

## **2.2. Generation Y Characteristics**

Generation Y people grew up in an optimal economic situation. They have not really experienced situations of great wars, economic depression, high unemployment or inflation rates; they constitute an optimistic generation used to a relatively high standard of living: large homes, two cars per family, eating out, going abroad and more. Still, Generation Y people experience a sense of vulnerability regarding their economic steadfastness and are not as sure about their future prospects (McCrinkle, 2014).

More than members of other generations, Generation Y people have high lifestyle demands, and are rather tolerant to debt that supports this lifestyle. Their parents' provided financial security, and they expect to start their path in life in the same way their parents have been living. The fact they have not lived through harsh experiences causes many of the Y generation members a lack of character and life skills necessary for withstanding stressful situations and taking responsibility. This experience has created a generation with an external focus of control and invest a great deal in traveling around the world and enjoying life. Many of them still live with their parents, whom they amaze with their emphasizing rewards to efforts, transition from one workplace to another and from one partner to another, which creates a feeling of haste and lack of commitment on their part. They are result-oriented multi-taskers who can handle the burden of various tasks without experiencing stress or distress (McCrinkle, 2014).

### **2.3. Generation Z Characteristics**

Generation Z is a digital generation that has not experienced life before the IT (Internet Revolution) era and is also referred to as the monitor or plasma generation. Generation Z members have become accustomed to communicating with each other and with the constantly connected world at all times. Cell phones are an integral part of their lives, maturation and self-identity. They enjoy a sense of belonging and community on social networks. They have high global awareness and learn more through observation and experiential practice than their predecessors, as they tend to rely on search engines more than on books or research. High education is a central value for them, and their areas of interest focus on practical fields with emphases on entrepreneurship and economics. Career is very important to them. About half want to start their own businesses and unlike the Y generation, which is characterized by a yearly exchange of jobs, professional development alongside generous wages, the Z generation will stay in the workplace. It is a generation of manufacturers, creators and inventors (Carter, 2018; Turner, 2015).

## **3. Research Method**

### **3.1. Challenges Posed by Generational Gaps Education**

The literature presents a general classification of learners' groups: Some cognitive learners prefer personal and meaningful information to be conveyed "in their own words", whereas global learners seek discussions and work with others (Pitts, 2009). Kinesthetic learners prefer a practical approach to learning. They acquire information more effectively through hands-on sessions, case studies, or computer simulations rather than in lecture only (Meehan-Andrews, 2009).

Boctor (2013) found that most nursing students to be kinesthetic learners. According to Dale (1969) people learn 10% of what they read, 20% of what they hear, 30% of what is shown, but 90% of what is said and done in combination (Kennedy, 2006). Besides differences in learner styles, generational gaps play an important role in students' beliefs and expectations of the learning process in the clinical field, their perceptions of the clinical instructor's role and their approach to the preferred learning style in their eyes.

Prensky (2001) coined the term 'digital natives' digital natives to refer to the new generation of learners. Prensky argued that these students ways of thinking and processing information are substantially different from those of the previous generation; thus, they speak the digital language eloquently and at the native language level.

The professional literature mostly indicates that the new learners have a fast, aspirational response abilities, desire for immediate and ongoing interaction, they consider themselves technologically capable experts, who have high expectations of technology, tend towards independent or autodidactic learning and are comfortable in digital and visual environments.

Generation Y people preferred learning style is working in groups with hands-on experiences. They enjoy trial and error. They do not value reading and listening to lectures as highly as has been traditional in medical education. They want their learning to be creative, interactive, and fun; and they enjoy thinking outside the box (Eckleberry-Hunt & Tucciarone 2011).

Most of Generation Z students expect technology, not books. They learn by observation and practice. They prefer doing over memorizing. They learn by solving real-world problems. Educational institutions need to provide a variety of innovative teaching methods to keep them interested and active. Their preferred communication method is texting, and often seek collaboration, thinking independently at first and then discussing their thoughts as a group (Adobe, 2016).

### 3.2. Challenges Posed by Advanced Teaching Methods

The way traditional and innovative learning contents are delivered in schools has influences the learning process of new learners. In most cases, there is still a broad gap between lecturers' learning and teaching perceptions and those of the new generation of learners.

The first paradigm shift is from curriculum-centered to student-centered learning. In this way, in order to promote deeper learning approaches that encourage critical thinking, collaboration, self-learning, active learning, and independent development of ideas, teachers must change their teaching methods so as to include strategies that encourage self-study. Furthermore, teachers should recognize the knowledge that students bring with them to the classroom and help them integrate this knowledge with new knowledge they acquired so as to apply it in new situations, building them confidence in finding their own solutions.

The new learners are accustomed to up-to-date digital technologies and tend to have low patience thresholds for those who do not quickly grasp the constantly changing circumstances. Since the new learners are accustomed to instant feedback, teachers can adjust their feedback time accordingly. Play, gaming, and simulations have been shown to be learning strategies that enhance student involvement and learning outcomes in diverse educational contexts (García, Navarro, Rodríguez, Fernández, & Freixes, 2017).

The main barrier that teachers face with new learners is lack of technological knowledge and skills, along with restrictive approaches and beliefs regarding the use of technology. Shatto and Erwin (2017), noted the gap between the teachers' generation and that of new learners and the lack of technological understanding on the part of teachers, which affects their teaching. Like previous millennial generation, generation Z is also accustomed to a rapidly changing technological environment, multi-tasking and roaming smart devices of various sorts. New learners are capable of playing video games, watching TV, being present on the social network and complete homework at the same time. Teachers and lecturers may interpret this behavior as lack of attention to lessons.

Required changes to ways of teaching involve a shift from traditional frontal classroom teaching, which no longer suit the new student generation, to using innovative methods such as a 'flipped classroom' and active learning that allows students to participate through case study, group projects, online voting, blogs, or critical thinking assignments. Narrative tools or storytelling can be used in a discussion that presents diverse opinions and perspectives. Moreover, Shatto and Irwin argued that students should be encouraged to use their digital devices in class as a strategy to involve them in the learning process.

## 4. Analyses and Findings

### 4.1. New Learning Strategies

In 2016, the Global Forum for Innovation in IOM Healthcare Education announced the need for a reform in health care professions training processes, in light of the existing gap between future graduates' skills and existing teaching methods and curricula (Workshop Summary, 2016).

Integration of different teaching methods in nursing may enhance students' ability to respond professionally in different situations that arise in a clinic.

### 4.2. Advanced teaching Methods

The literature presents advanced methods tailored to the needs of the new generations in nursing:

**The Five-Minute Preceptor = 5MP** - When time management in training is critical, the training through this model allows mentoring in five minutes. The first stage is the practical experience in the clinical event; at the second stage, students share the event while taking a stand towards supporting evidence, the third stage is reflecting the practice while learning the principles and rules. At the fourth stage, a discussion is held based on the intervention's results while providing positive reinforcements; finally, the fifth stage, includes assessment of learning and planning for the following intervention while correcting deficiencies and misunderstandings. This is a simple model, suitable for teaching important clinical behaviors, while its effectiveness in nursing is validated and reliable (Bott et al., 2011).

**Group discussions** – Participation in discussions and interaction among students is important for expressing attitudes and enhancing a sense of self-esteem (Numminen et al., 2009).

**Integrated Learning** - Students reported that learning that integrates classroom lectures and online instruction allows for critical analysis and problem solving (Hsu, 2011).

**Problem-based learning** – Students prefer problem-based learning methods to traditional teaching. Problem-based teaching stimulates independent learning, encourages critical thinking, and understanding of ethics in nursing (Lin et al., 2010).

**Reflection** - Reflection can be done through a diary or log in which students describe their experiences. Discussion along with writing the diary/log helps understanding of the experience and formulation of attitudes (Kyle, 2008).

**Integrating medical professions' students** - Small discussion groups for case presentations that include nursing and medical students. The joint discussion allows for learning about issues from different professional perspectives (Edward & Preece, 1999)

**Simulation Lab Practice** - Experimentation in simulation labs, where students played as patients suffering from pain, helplessness, fear of unsafe treatment and apathy towards them, helped students in their observation and insight into their functioning as caregivers in practice (Vanlaere & Gastmans, 2007).

**Debate (Organized Conflict)** - The use of debates allows for critical thinking and exposure to several perspectives for appropriate responses to nursing dilemmas. Debates lead to profound discussions in class or in a large group. Students are required to prepare and present their arguments. Thus, this method involves active student involvement (Bradshaw & Lowenstein, 2011).

**Distance Learning** - In the era of a major health crisis as we are currently experiencing, the Covid-19 crisis, students are required to stay at home and all study activities were ceased. Distance learning is an advantage for a large population that cannot physically reach the classrooms and is a creative solution in this or any other unexpected situation (Thompson & McGrath, 1999).

**Play** - A powerful educational tool that is described in the literature as an effective strategy not only in education generally, but also in nursing education (Oblinger, 2004). Play as a teaching strategy in nursing education requires students' participation and recruitment in problem solving and critical thinking. Play motivates learning, creates an interesting change in traditional learner' and teachers' roles, and thus, learners to undergo different experiences and opportunities to become teachers, colleagues, team leaders or team members (McLafferty et al., 2010).

**Use of technology and social media** - Students who use smart phones and tablets as 'learning supports' master the digital world and use innovative technologies for learning. Using social media applications enables students to integrate resources and express diverse strengths. Social media increase opportunities for applying innovative teaching methods emerging from understanding nursing students' ability to use the Internet. The more increased the use of social media, the more learning environments are built (Tuominen et al., 2014).

**Virtual Reality** - The use of virtual reality may make learning through online platforms a reality less than a classroom session. In Israel this platform is now used in the MDA (Magen David Adom) organization. Magen David Adom is the State of Israel's national organization responsible for emergency pre – hospital medical care and blood services. The MDA train paramedics and senior resuscitation experts with virtual reality technologies to create simulations of mass casualty incidents and showcase (Yaffe, 2017).

## 5. Conclusion

This review focused on the issue of new learners, intergenerational differences and their learning characteristics, the challenges of learners' needs as well as tailored teaching methods and the need to design new learning strategies in the digital age. With the changes in technology, the traditional model no longer provides a sufficiently effective learning method.

Teaching strategies in nursing education are required to adapt to future trends, advance graduates' preparedness for teamwork and new skills that will be required of members of the new generation. It is important to adjust different teaching methods, identify the differences and employ innovative teaching strategies to address the diversity and intergenerational gap.

To promote successful strategies, educators will comprise hands-on teaching, simulations and group discussions. Teachers should not rely on lectures as a primary teaching method. When lectures are used, they should involve multimedia presentations or introducing live patients to discuss cases with the audience's participation. Educators should present case studies that will involve students' active problem solving and make the transition to student-centered learning that will allow for contents and activities in congruence with students' areas of interest alongside technological developments. Educators can rely on their generational experience and help future-nurses accomplish goals with maximum creativity, high self-efficacy and motivation.

It is important to note that in contrast to the literature's focus on generation Y's, there is room for extensive research pertaining to generation Z - emphasizing the gaps between learners' needs, the role of school in designing generation-compatible learning environments and developing innovative ways to adapt teaching practices to the new learners' population. In addition, the real challenge will be the future generation Alpha, which is expected to be more educated and entrepreneurial than generation Z, characterized by innovation and development capabilities and growing into an advanced technological environment with artificial intelligence and automation.

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