

Millennials and Dental Education: Utilizing Educational Technology for Effective Teaching

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Introduction

Millennials arrived on campus in the year 2000 and will continue to be part of the college campus for the next decade. Their unique characteristics, diversity and expectations for the learning environment are transforming the college classroom and challenging faculty to examine traditional pedagogy as well as the learning environments offered to students.¹ Attitudes, beliefs and values are influenced by the people, places and events in our history, and therefore uniquely shape each generation. Like generations before them, these influences establish different motivation levels, work ethics, and worldviews that impact teaching and learning. This presentation will aid in understanding generational differences and may help dental educators improve their teaching effectiveness.

Millennials have and will continue to influence higher education first, as students, then as faculty. Millennials bring a new generational personality to the college campus which includes optimism, structure, team orientation, and a confidence that some believe borders on entitlement.² Millennials are used to being engaged with adults, and have strong bonds with their parents who throughout their lives have told them they were special and included them in decision-making. Consequently, most have the same values as their parents, respect authority and are rule-followers.² Millennials had less academic demands in high school than previous generations and, upon arriving to campus, expect the same minimal demands in college. Faculty have found that these students have unrealistically high expectations of success combined with a surprising low level of effort on their part.³

Millennials exude confidence and are extremely optimistic. The majority of Millennials are personally happy and excited about their future as they believe they will correct the ills of society.² Tangible achievements and rewards are important to them and they expect praise and encouragement from their college professors, as all of their lives they have heard “good job” for most of what they

did. Since their arrival on the college campus in 2000, faculty have been trying to figure out how to manage the amount of involvement and feedback these students demand.

Millennials are high achievers and are focused on grades and performance.⁴ This generation wants a clear, structured academic path and sees a college education as an expensive consumer good. This mind-set translates tuition into a college degree and good grades. In the classroom, students will often dismiss homework as “busy work” when it has no relevance to personal goals. In college, Millennials are finding that self-esteem cannot deliver their expected success and many are showing signs of stress, anxiety, and hence, the rise in academic and mental health resources on today’s college campus.

Leisure time is a priority for Millennials. When these students were growing up, they were highly scheduled with traveling sports teams, music lessons, camps and organized playgroups. As college students, they have less “free time” than any other generation of students due to time commitments to school, sports, social activities, work and volunteerism. Technology allows Millennials to stay connected and has blurred the lines between work and life. They stay in uninterrupted contact with the world around them and consequently, the workday is no longer nine to five, thus motivating Millennials to desire work/school-life balance.³

An abundance of information has focused on the traits of Millennials; however, less has been published on teaching methodology that aligns with the way Millennials learn. Interestingly, many components of Millennials’ ideal learning environment – less lecture, active learning approaches, use of multimedia, collaborating with peers – are some of the same pedagogical approaches research is showing to be effective.^{4,5}

First, because of their highly scheduled childhood, their need for structure carries over into the

classroom. The more structured and planned the course, the more secure and satisfied this student will be. This generation prefers to know the facts and does not like ambiguity. A common question of this cohort is, "What do I need to know?" Millennial students expect emphasis on core knowledge and skills and expect frequent formative feedback on their performance, as well as frequent review sessions. Frequent formative feedback has shown to improve the learning process, and literature suggests people learn when they actively monitor their learning and reflect on performance.⁵

In addition to their focus on what information they need to know, Millennial students want to know why they need to know it. Their desire for learning to be relevant and related to their experiences cannot be underestimated.⁴ However, this student has difficulty seeing the big picture and thinking independently and will rely on the instructor to make a connection between their life and course material. Teaching methods emerging from constructivist theory support the way Millennials want to learn, including active learning strategies such as cases, cooperative learning, group projects or skill demonstration. Millennials also desire variety in the classroom and interestingly, research has demonstrated people learn best when they receive the new materials multiple times but in different ways.⁵ Service-learning in education grew out of constructivist theory as well, and when paired with structured reflection has been demonstrated to improve students' academic, personal, social and citizenship skills.

Millennials' penchant for connection is manifested in the classroom in several ways. After many years of collaborating at day care, sports

teams, school and volunteer projects, Millennials know how and when to work with other people very effectively.² Accustomed to teaming-up, these students desire collaborative learning in the classroom. Millennial health care students are primed for health care reform which emphasizes team-based care and interprofessional education. Their desire for connection extends to faculty as well. Having been raised by caring parents and other adults, Millennials want faculty to get to know them and care more about how their professors interact with them than about what their professors know.⁴

Technology is perhaps the most distinguishing characteristic of the millennial generation. For this generational cohort, personal computers have always been there and are as ubiquitous and common as a coffee pot. Millennials expect a multimedia enriched environment in the classroom. Interestingly, professors who use multimedia (YouTube, movie clips, etc.) saw better student test scores on quizzes and examinations.⁵

They expect that there will be communication with faculty via e-mail and have access to online resources. Faculty will need to serve as a facilitator in order for students to collaborate with each other. It is important for faculty to "frame" the course and supplement student interactions by providing resources and opportunities. Additionally, faculty need to develop a conceptual rationale for incorporating technology into their teaching, identifying how it fits with their philosophy of teaching and learning. In other words, technology should not be used for its own sake but rather only if it enhances teaching and learning.⁶

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