A song recorded by Buffalo Springfield began with the lyrics, “There’s something happening here. What it is ain’t exactly clear” (Stills, 1967). Many nursing faculty would share that sentiment about teaching in today’s academic environment. They feel challenged because teaching strategies that have served them well in their careers are not working with our newest generation of learners—the Net Generation. Their observations about differences in how today’s students read and think are being validated by scholars who study the influence of technology on learning. The attitudes, expectations, and learning styles of Net Generation students are different than those of the previous generations and reflect the environment in which they were raised. These students are transforming the historical image of the college experience and classroom. Despite the disruptive innovation that technology has introduced into almost every aspect of life, including education, many faculty in academia today still cling to sacred cows and complain about suboptimal student performance (Oblinger & Oblinger, 2005). The trends we see today with our students are likely to accelerate as technology assumes a bigger role in our lives. It is time to rethink how we teach the Net Generation.

The Net Generation born between 1980 and 2001 are 90 million strong in the U.S. population and account for the majority of today’s undergraduate college students (Alsop, 2008). This is a generation that is often described as digital natives, whose formative world has been dominated by technology. They almost instinctively turn to technology to understand, learn, and search for new information, although not all members of this generation are equally technology proficient (Vaidhyanathan, 2008). Tapscott (2009) noted that this is the first time in history that most young people are more comfortable, knowledgeable, and literate than their parents and teachers about an innovation that is central to society. Students today are learning, socializing, communicating, and forming collaborative communities very differently from previous generations. Newspapers are moving to online formats to remain competitive. The election of Barack Obama in 2008 provides an instructive example of how social networking was used to reach the Net Generation and transform politics.

Drawing from research with 7,600 Net Generals globally, Tapscott (2009, pp. 34-36) described eight ways in which they differ from their parents and teachers:

1. They want freedom of expression and choice.
2. They love to customize and personalize all aspects of their world.
3. They are the new scrutinizers and demand transparency.
4. They look for corporate integrity and openness in their purchasing decisions.
5. They want entertainment and fun in their work, education, and social life.
6. They are a collaborative and relationship-oriented generation.
7. They have a need for speed with technology.
8. They are innovators.

Although many of these differentiating characteristics are positive, some educators contend that the Net Generation’s constant connection to technology has come with an intellectual cost. It is widely observed in academic environments that today’s college student reads less, has poor writing skills, uses unreliable information from the Internet in academic work, and shamelessly violates intellectual property rights (Carlson, 2005; Oblinger & Oblinger, 2005). Although not yet well understood, neuroscientists, including Gary Small at the University of California Los Angeles, suggest that some of the changes we see in the classroom with Net Generation students, such as shortened attention spans and skimming of reading material, may be a biological adaptation. He has proposed that the human brain is reprogramming itself to respond to how we seek and absorb information with new technologies (Small & Vorgan, 2008).

In a recent article in Atlantic Monthly magazine, Carr (2008) asked whether Google is making us stupid. Reflecting on his own experience, he reported that while researching on the Internet has been a godsend to him as a writer, it has chipped away at his capacity for concentration and contemplation. Erin Kunkel (n.d.), a member of the Net Generation and an employee of the Energy Project, captured the experience of growing up with sound bites of information and the influence it has had.
on how she conducts information searches. She describes the dilemma of sacrificing depth for breadth and settling for “good enough” rather than embracing the diligence, patience, and passion required to do more in-depth work. Kunkel acknowledged that although many in her generation are hungry learners, their multitasking and focus on technology has eroded their capacity for sustained attention.

Part of the role of a contemporary educator is to help students prepare for a future world where the pace of change will continue to accelerate particularly in technological developments. Although the observations outlined above regarding the effects of new information technology on rewiring brain circuits have not yet been conclusively demonstrated, viewing the changes we observe with the Net Generation in their approach to learning through a lens of biological adaptation can help set the stage for a paradigm shift in education. The challenge for nursing faculty today is to capitalize on the strengths that Net Generation learners bring to the classroom while seeking ways to help them build their skills with content that requires critical inquiry. Tapscott (2009) observed that many educational environments continue to use an industrial age approach to teaching in a digital age. He suggests that today, what you know is less important than being able to process new information at lightning speed. In addition to mastering the basics of reading and math, students need to be taught how to look for information, analyze it, and critically evaluate its value.

In his new provocative book, What Would Google Do?, Jarvis (2009) wrote that Net Generation students learn by constructing knowledge and meaning for themselves both individually and socially. Skiba and Barton (2006) proposed that this is why simulation and virtual reality games work so well with today’s learners. They become engaged in the process and receive feedback from their teachers and other students that will serve them well in real-life situations. They also recommend learning blogs and wikis as a way for students to reflect on what they are learning and interact with one another as a community of learners. Interactive devices in the classroom, such as clickers (i.e., classroom response systems), can help instructors to maintain the engagement of learners in large class settings. Students can periodically be given questions regarding their knowledge or opinions about a topic, with answers that are displayed for the class to view. Arhin and Cormier (2007) offered some interesting strategies based on a deconstruction approach to teaching to improve the reading skills of the Net Generation. Students can be assigned readings from multiple sources on the same topic and then be asked to evaluate the topic from the different perspectives. They can also be assigned to evaluate content that is missing from a source to promote the development of better information search skills. They also recommend that students be asked to view information and issues from the perspective of how it affects their lives and the care they give patients. Student electronic journaling of clinical experiences that are sensitive to patient privacy and the use of content mapping are additional strategies offered for clinical instructors.

The examples above are innovative practices that have already been implemented in many nursing education environments. Bleich (2009), in a guest editorial in the Journal of Nursing Education, urged educators to embrace the potential of the advances that technology offers in educational settings and engage in conversations that will creatively advance nursing education. Old paradigms can be hard to change, but something is happening here. Nursing faculty need to have conversations about the influence of new technology and the sea change in how students prefer to learn. There is an urgent need to stop resisting change, to rethink our current models of pedagogy, and to become more student centered in our teaching.

References