

Educating the Net Generation

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Diana G. Oblinger and James L. Oblinger, Editors



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Educating the Net Generation

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The Student's Perspective

Carie Windham

North Carolina State University

Introduction

We sat across from one another, he in his cracked leather desk chair and me in a wooden chair taken from the hallway. He leaned back, arms crossed, eyes peering over wire-framed glasses. I strummed my fingers nervously on the chipped wood of the chair's arm.

"I e-mailed you the proposal last week," I said. "I don't understand why the topic change came as a surprise."

"I didn't get it," he said simply.

"I sent it a week ago. Maybe it came back; I don't know."

"I'll be honest; I don't check my e-mail."

I paused.

"Ever?" I asked.

"Ever. Can't stand it."

"Right. Should I have called?"

"I don't check voicemail either."

My brow furrowed as I contemplated my next move.

"So how exactly do you stay in touch with your students between classes?" I asked.

"Well, I expect that they'll hunt me down on campus if they need anything."

I sank back in the chair and stared at his desk, scattered with haphazard Post-Its and torn notebook paper. A cassette-tape answering machine gathered dust in the corner. An overstuffed planner bulged near my seat. I thought of my own desk at home—neat, sterile, a laptop and a Palm Pilot.

"So you're serious? No e-mail and no voicemail? Do you even use the Web?" He just smiled.

Though we sat just four feet away from one another, the distance suddenly felt light years apart. I would find out, in subsequent conversations, that my profes-

sor—a relic of the Greatest Generation—did, indeed, surf the Web when it was necessary. But he preferred the newspaper over CNN.com, the weatherman over WeatherBug, and face-to-face visits over e-mail exchanges. He dusted off journals from the 1980s and flipped through their pages, and, if you asked him, he actually knew how to load one of those microfiche machines on the second floor of the university library. He represented, for me, a world I could scarcely remember—a world before driving directions on MapQuest, book buying on Amazon.com, and making plans on Instant Messenger—a world when tasks were managed one by one instead of all at once on multiple Web browser windows.

I am a member of the Net Generation. I've surfed the Web since the age of 11, and it has increasingly taken over every facet of my personal and academic existence. I can barely recall making plans before the advent of IM and have rarely attended a campus meeting without setting it up over e-mail first. I get my news, my weather, my directions—even my clothes—from the Web. And, as my peers and I continue to flood the gates of the nation's colleges and universities, I am a puzzle to many of the faculty and administrators who will try to teach me. They will either try too hard to transform education into the virtual language I understand or too little to accommodate for the differences between us. Just as with past generations, however, all that is required is a basic understanding of what being a Net Gener really means and how it translates to the classroom.

Meet Generation Y Not

It's easy to call myself a Net Gener—to talk about the pains of growing old in the Net Generation, to trade glib remarks with my peers about those fossils who grew up tied to their landline existence. Defining what all of it means, however, is another story.

As a future historian, I've learned that everything in time must, eventually, fit neatly into a series of ages, categories, or generations: the Baby Boomers, the Bronze Age, the Silent Generation, the Renaissance. So, naturally, countless hours of history lecture were dedicated—in my head—to the role that my generation would play in future history texts. Would students in 2105 find us materialistic? Self-absorbed? Would we be defined by September 11 or the War on Terrorism? Quite frankly, I didn't know.

Luckily, where my history musings fell short, the social sciences dedicated countless hours and volumes to dissection. And fortunately, the prognosis was good. Though the youngest among our ranks are barely teenagers and the old-

est have just entered the workforce, it seems posterity will forever remember the Net Generation as the Next Greatest Generation. Or, if we fail to measure up, the Generation That Could Have Been the Next Greatest.

According to Neil Howe and William Strauss, authors of *Millennials Rising: The Next Greatest Generation*,¹ my friends and I are nothing like our immediate predecessors in Generation X. We are academically driven, family oriented, and racially and ethnically diverse. We are committed to telling the truth and traditional values, yet we refuse to accept our elders' speeches or sermons at face value. We are not politically active, but community centered. We truly believe we have the tools and the desire to solve the lingering problems that our parents' generation has left behind.

In my own experience, both as a Net Gener and as a student leader and journalist at North Carolina State University, Howe and Strauss and their colleagues are not entirely off base. But the generalities require greater exploration, especially in the role they will play for college faculty and administrators in determining how best to reach the next generation of learners.

Driven to Succeed

Net Gener, for the most part, are not just driven by the notion of achievement—they are consumed by it. Drilled by guidance counselors, parents, and teachers about the importance of attending college in determining our own self-worth and success potential, the race for the top began for some of us in middle school. We quickly learned that a 4.0 grade point average is no longer sufficient to get a foot in the door of a good school and that every applicant would be able to claim honor roll as an achievement. To distinguish ourselves, therefore, we load our schedules with honors, advanced placement, and international baccalaureate coursework. We take classes from community colleges. A portion of us even enter college with sophomore standing.

And achievement is no longer limited to the classroom. College-bound students learn early that extracurricular activities, leadership development, athletics, and community service are not only to be enjoyed but exploited. In a world where high school transcripts increasingly look more uniform in their perfection, a role as president of SADD—Students Against Destructive Decisions—might be enough to tip the scales in your favor. And you know it.

Even at the university level, we feel pressure that our degree simply will not be enough. We've watched the economy falter and jobs disappear. We sat through the

dot-com bust (feeling fortunate we were still in college, at least) and heard analysts share horror stories about students with four-year degrees and nowhere to go. Those fears have driven Net Geners outside the normal confines of the classroom and made them desperate to add both value and experience to their degrees. Internships are taken during the summer, co-ops throughout the year. Clubs are joined and community service embraced. It is enough, by junior year, to leave us wondering at what point all the preparation for life ends and enjoyment actually begins.

For college administrators and faculty, it means that each class of incoming freshmen will be more stressed than the last. The average college-aged Net Geners sitting in the back of the classroom will have more than the weight of a 15-hour course load on their shoulders. Instead, most will be juggling a position or role in a campus organization, a part-time internship, an independent research project, and applications for summer jobs and graduate school. They will be masters of multitasking and—by the time they graduate—will leave with a suitcase of experience and an ulcer lying in wait.

Driven by Compassion

Our capacity for community service and engagement is not entirely tied to our desire to succeed, however. From a very early age, my peers and I have been exposed to opportunities for service and examples of servant leaders in the community and in history. Community service is not just an opportunity to the Net Generation, it is a responsibility.

The average American high school encourages community service through service clubs, service awards, service requirements, or service-learning courses. Religious groups and national humanitarian organizations, bolstered by the falling prices of international travel, are taking youth on more trips around the world to teach the importance of a “global citizen” and a dedication to worldwide service. The nation and the media consistently praise and hold up examples of youth in service. It has become increasingly “cool” to give back.

Beyond high school, colleges and universities have increasingly become community centers for civic responsibility and community giving. Beyond a host of service organizations, most universities have departments on campus to coordinate service projects, plan service trips for extended university breaks, and support service organizations. Other student bodies, like that at NC State, coordinate mass days of service that often draw thousands of volunteers to work with service groups around the community.

This acceptance of and emphasis on social responsibility has also changed the way the Net Generation looks at careers. Priority within our ranks is placed less on monetary value and fame than happiness and “doing something good.” We join programs like the Peace Corps, AmeriCorps, and Teach for America in record numbers and repeatedly express an interest in a career that will—somehow—impact the future and other people.

Driven by Hope

It is true, as Howe and Strauss indicated, that the Net Generation is an overly optimistic generation. We have not seen the corruption of power or felt the fear of the Cold War. Instead, we’ve watched technology solve problems and alleviate the rigors and stresses of our everyday lives. Just as society often views technology as a vessel for progress, we see ourselves as the future navigators.

There is an unspoken sentiment within our ranks that the problems of the world have largely been deposited at our feet. With the hole in the ozone layer growing, peace shattering, and disease raging, many of us feel that older generations have simply stepped aside to make room for our ingenuity and creativity. And, largely, we feel that we are up to that challenge. In our eyes, our technological savvy makes us smarter, easily adaptable, and more likely to employ technology to solve the problems of past and present generations.

Father Google and Mother IM

Perhaps the greatest indicator of the Net Generation, however, has less to do with our habits and values than our namesake: the Internet. I met the Internet for the first time from my second-row seat in Mrs. Kingsley’s fourth grade class. We sat transfixed as a golden highway unfurled across the TV screen in a 30-minute film about the future of society. Soon, a voice promised, we would be able to talk to children across the world, access medical advice from our home computers, and search libraries across the country. The possibilities would be endless, the vaults of knowledge limitless.

After class, two friends and I stood in awe at the single PC in the back of the classroom. From that little box, we thought, we would soon access the world.

One friend picked up a yellow cable from the back. “Do you think this is it? Do you think this is the highway?”

I rolled my eyes. “They said the highway isn’t complete yet. It’s like cable—you probably have to wait until they dig the highway in your neighborhood,” I remarked.

It took years before I realized that the approaching Information Superhighway was nothing more than an interconnected system of networks. It would take many more before I realized the way the Internet had permeated almost every facet of my life.

Technological Masters

Growing up alongside the wheels of Web-based progress has instilled a feeling within the Net Generation that technological understanding is a necessity for current life and future existence. We cannot succeed in this world, we reason, without an understanding and command of technological advances. This feeling is reinforced by the emphasis on computer literacy in public school curriculums and the nagging feeling that few jobs in the future will not rely on some form of computer technology.

To keep pace, Net Geners have become some of the most technologically adept members of society. Our cell phones often serve as Web browsers, digital phones, and game consoles. We keep our schedules and addresses in Palm Pilots and our music in MP3 players. We program our televisions to record movies while we watch a game on another channel. We strive to stay ahead of the technology curve in ways that often exhaust older generations.

This drive to keep pace with current trends is not fueled by society's ability to educate and teach these technologies. Instead, we are a generation of learners by exploration. My first Web site, for example, was constructed before I had any concept of HTML or Java. I simply experimented with the commands until the pieces fit together. I have installed every addition to my computer myself, often with just my instinct and eyesight to guide me. Likewise, many of my peers rarely pick up the instruction pack to learn programming or a technique. Instead, spurred by our youthful exploration of the Internet, we tend to learn things ourselves, to experiment with new technology until we get it right, and to build by touch rather than tutorial.

Filling the Attention Deficit: Reaching the Net Generation in a Traditional Classroom

In middle school, my second-period health class took a break from memorizing the food groups to learn healthy study habits. Flipping idly past images of red-shirted, blue-panted stick figures seated upright in desk chairs in our text, we were told that the best way to study was to isolate ourselves from the television, the tape

player, and the busy sidewalks outside the window. We were to clear a nice study corner with a comfy chair, good lighting, and ample work space.

If Harcourt Brace were to evaluate my college study space, it would—no doubt—be the antithesis of healthy study habits pictured in one of their textbooks. There would be no clear desk, no silent cocoon, no harsh lighting. Instead, *Law and Order* reruns would be playing in the background. To my left, a trail of jumbled cords would stretch from my bedroom to a laptop on the couch cushion. My IM buddy list would be minimized on the screen, but noise alerts would be turned on to tell me when friends signed on or off the Internet. A collage of browser windows would remain open, one directed to CNN.com to read the day's news between chapters, another to my e-mail to know exactly when the next piece of mail arrived, and then another to Google, in case the text raised any questions. Somewhere in the middle would be me and a history textbook turned to page 149.

My study space—which could be found in the average dorm room suite—is characteristic of my life. With information and accessibility lying effortless at my fingertips, I have grown accustomed to juggling multiple tasks at once, at lightning speed. In the average online conversation with a friend, for instance, I am likely to be talking to two others, shopping online at Barnes & Noble, laughing out loud at *Friends* reruns, and printing off notes from a chemistry lecture. It is only in the classroom, therefore, that my mind is trained on one subject. To keep it in place requires some flexibility and creativity on the part of the professor and an understanding of the basic principles that guide the Net Generation.

Interaction

Though online communication is often seen as the opposite of personal and the antithesis of contact, for the Net Gen it is certainly not seen as such. Instead, the Internet has become a vehicle for interaction. It allows us the opportunity to communicate with friends, to participate in chat room discussions, and to stream video from around the world. In short, it allows interaction with a variety of people and material.

In the classroom, we crave much of the same. An online society may increase the means of communication, but it does not diminish the human need for connection. Instead, many Net Generations often leave the computer screen craving actual conversation and interaction with their classmates. To capitalize on this need, faculty should encourage interaction both within and outside the classroom. Group work should be emphasized alongside required one-on-one meetings with

professors. Students should be given the opportunity to interact with faculty and researchers outside the confines of the curriculum and to develop meaningful relationships with them.

Exploration

Just as we want to learn about the Web by clicking our own path through cyberspace, we want to learn about our subjects through exploration. It is not enough for us to accept a professor's word. Instead, we want to be challenged to reach our own conclusions and find our own results. Lessons last longer, in our minds, if we understand the relevant steps to reach them.

Therefore, a need to explore is implicit in our desire to learn. Rather than discussing bias, for instance, a journalism professor once asked my class to analyze several articles and discuss their diction. We arrived at the conclusion that the authors' bias was implicit in their work with little direction. We left class that day with both a sense of accomplishment and a deeper understanding of the journalistic themes the professor had hoped to explore.

Relevancy

In a world where technologies change daily and graduates armed with four-year degrees are entering the workforce in record numbers, there is an increasing fear among the Net Generation that a four-year degree will be neither relevant nor sufficient preparation when it becomes time to enter the work force. Consequently, students are consistently looking for practical applications of their studies in a real-world context.

Establishing relevancy in the classroom is not as simple as it sounds. It does not equate to presenting a laundry list of future occupations or examples of a field in the news. Instead, more and more curricula are focusing on the notion of extension, or applying the lessons learned in the classroom to real-life problems, institutions, or organizations in the community. For the Net Generation, such curricula speak to two of its values: community service and interaction. Extension is an opportunity to help a community while learning the real-world application of taught material and acquiring relevant skills and experience.

As a history major, for example, I spent a semester researching a cultural heritage site on the North Carolina coast. Beyond simply teaching documentary skills, the experience helped glue together the pieces of four years of courses to demonstrate how my degree would eventually translate into marketable skills.

Multimedia

Turn on the nightly news and it is clear that no medium is one-dimensional. Prose is supplemented by song. Photographs are accompanied by video. Issues are even turned into online polls and discussions. For the Net Gen, nearly every part of life is presented in multimedia format. Even my study space, as I detailed before, is a hodgepodge of digital, audio, and text information. To keep our attention in the classroom, therefore, a similar approach is needed. Faculty must toss aside the dying notion that a lecture and subsequent reading assignment are enough to teach the lesson. Instead, the Net Generation responds to a variety of media, such as television, audio, animation, and text. The use of a singular unit should be kept short and alternating, producing a class period as diverse in structure as it is in content.

In my four years of courses, the best example of a multimedia classroom comes from a three-hour seminar I participated in on the Vietnam War. Though the prospect of spending three hours in the same cramped classroom was daunting, the professor employed a variety of media to keep our attention. Class began with a song from the period, and film clips were used throughout to illustrate key themes or replicate events. The lecture alternated discussion interspersed with photographs, tables, and graphics. As a result, most of us were more alert and interested in this class than in previous 90-minute classes, despite the considerably longer class time.

Instruction

It's easy to deduce that all this technology has made the Net Generation lazy. We don't pick up dictionaries anymore—we go to Dictionary.com. We don't walk to the library—we search online journal databases. We wouldn't know an archive if we stumbled into it on the way to the fax machine. Though the Internet is attempting to phase out these standard methods of research, they are important, nonetheless.

The average college student, however, has no clue how to navigate or investigate the modern library. Instead, students increasingly rely on Web sites and Internet archives for information—increasing the likelihood that they will stumble across and cite false or incorrect information. For those reasons, modern classrooms, faculty, and libraries must still teach and demonstrate basic research skills such as finding journals, evaluating primary sources, digging through archives, or even perusing library shelves. Today's students may believe they can learn solely on the Internet, but they cannot.

A Virtual Education: Crafting the Online Classroom

Philosophy: my nemesis. For five semesters I had cleverly evaded its call—pointedly skipping over the requirement with the dim hope that a registration glitch might fill the spot without my actual participation. But as graduation grew closer, the empty spot next to its name hadn't budged. So, with a sinking feeling of dread, I decided to budge instead.

My only consolation, as I dutifully joined the roll for Philosophy 205, was that Introduction to Philosophy was finally being offered in a Web-based course. I had never tried an entirely "virtual" classroom before, thinking such endeavors were better suited to distance education students or those with full-time jobs. But philosophy? That could be an exception.

The class was set up with sincere trust and respect for the student. Reading assignments from an assigned text were listed on the course Web site. For grading, we were asked to periodically turn in homework questions from the text and to take occasional quizzes and exams. Every exam was open note and open book with a three-hour window of time. The homework was loosely graded.

For the first exam, I read every chapter and highlighted the notes from the study guide. I finished the test in less than 30 minutes. For the second, with the full weight of a 16-hour semester upon me, I did the reading but skipped the highlighting. I finished in an hour. For the next exam, with two test experiences under my fingertips, I skipped reading altogether and simply searched for the answers in the text. The test took nearly two hours. Each time, the grade was the same. By the end of the semester, I couldn't tell the theory of relativity from utilitarianism. But speed reading? I was a master.

The professor had assumed, while crafting his course, that putting philosophy on the Web would give his students more flexibility to shape their own learning experience. We could read at our own pace. We could respond to message threads at our leisure. We could even take tests with the full support of our text, our notes, and—in my case—our quick darting eyes.

What he hadn't expected, perhaps, is that the advent of the Internet and the opportunity of the online classroom had not diminished the need for traditional educational principles like discipline, engagement, and interaction. Instead, my online course had turned learning into exactly what I despised—a one-dimensional exercise in learning and regurgitating facts.

Take, as a counterexample, a course in Latin American History offered on the Web. Like my philosophy course, we were asked to read from an assigned text.

Instead of quizzes and tests, we were asked to periodically turn in essays and papers. The main difference, however, was that each week we were required to participate in online discussions relevant to our text or reading found on the Web. Some weeks we were required to simply post our own responses. Other times, part of the class was to counter the arguments made by another part. During some weeks, we were to evaluate and critique our classmates' arguments. Though it seemed effortless at the time, the exercises were a thinly veiled attempt to hold us accountable for the reading and to engage us in the material.

As technology improves and the "virtual classroom" becomes more popular, there is a tendency on the part of institutions and students to turn to online courses. They save resources and can accommodate more students. They are more flexible for busy schedules or commuters. But as these examples demonstrate, the online classroom must be created with the same care and expectations as the traditional one.

Students still crave interaction with their fellow students, even if they cannot see them. Otherwise, the online classroom seems cold and disconnected. To keep students engaged in the material and passionate about the subject matter, therefore, the professor must find a way for the students to interact with one another. Discussion forums are a natural solution and can be facilitated by posing questions for students to respond to or as simply a "free for all" for student discussion. The professor must be an active participant and facilitator, however, or students will diminish the exercises' importance. Another solution is virtual group work. Asking students to collaborate on projects or assignments forces them to meet and exchange ideas with their peers and fulfills their need for group interaction without actually meeting in a classroom.

Students also want diversity in both content and content media, a desire that should not be stifled by the assumed one-dimensionality of online coursework. While most online courses create a class Web site for posting assignments and logging in to take tests, these sites could be used as portals for multimedia exploration. One of the great benefits of the Web is its use of multiple media formats: users can stream video, listen to audio, and peruse photographic archives. It is important, therefore, to incorporate a variety of formats into the online classroom to keep content fresh and to appeal to the sensory habits of a variety of learners.

The Web-based course, unlike the traditional classroom, is also at an advantage visually. Net Gen learners are more likely to respond to visual images than a form of straight text. From childhood, we are bombarded by images on television, on

billboards, in magazines, and on the Web. A quick survey of newspaper evolution reveals the increased reliance on images—rather than text—to tell the story over time, and Net Gen learners have evolved alongside this phenomenon. To teach the Net Generation, therefore, requires the use of visual images in conjunction with text, a feat easily accomplished through animation and diagrams on the Web.

It's a common misconception that students take online courses to avoid the rigor and workload of a traditional classroom. In many cases, that's simply not true. When students choose an online classroom, they still want to be challenged. They still want exploration. And they still want creativity. Net Gen learners are not likely to excel in an environment where they are simply handed material and expected to recite it. Instead, most log on to online courses because they despise this traditional format of lecture and regurgitate. Instead, they feel they learn better in an environment where they can teach themselves. With that in mind, the online professor must find ways to offer students a method of exploration and research within the curriculum. Students might be asked, for example, to abandon the course Web page to search an archive or journal for information on their own. They might be asked to weave current events within the context of the taught material. Or they might employ their own technical savvy to construct research Web pages or blogs.

The simple rule is engagement—moving students beyond being mere participants in the class to become active learners and discoverers.

E-Life: The Net Gen on Campus

“Do you have a check? You could pay in a check.”

I scratched my head as I stood at the counter. Check... Check... I vaguely remembered seeing an unused checkbook tossed carelessly in the trunk of my car that morning. But even if I could locate it, I couldn't be sure it was in the right sequence. Or that I could even remember how to use the darn thing.

“Are you sure you can't take a debit card? Or maybe a credit card? I have Visa. Or Mastercard. Is that better?”

She smiled sympathetically and pointed to the sign behind her: CASH AND CHECKS ONLY.

I sighed and grabbed my application from the countertop. I needed to add money to my campus account but didn't have the energy to walk across campus to the ATM or to fish my checkbook from my trunk. Dejected, I pushed my way out the door. Just as I left, I heard familiar words from the counter.

“Cash? I have a debit card. Or could you take my credit card?”

It should be noted, in our defense, that most Net Geners use technology to navigate even the most mundane chores in life. Thanks to online banking, we no longer balance our checkbooks. Because of ATM cards, few of us know what that memo line on checks is even for. We pay bills online. We order books online. If it were a possibility, we would probably order our pizza online. The thought of doing anything in person, therefore, is not just scary, sometimes it's downright confusing.

Each new class of Net Geners will have technology to thank for removing one more obstacle from their everyday lives. My older sister, for instance, remembers sleeping outside the registrar's office to be first in line to register for courses during her sophomore year. I have only registered for courses online—in my pajamas—from the comfort of my dorm room. As technology replaces these exercises in our daily life, we expect our colleges and universities to follow suit.

To make campus and student services more accessible and accommodating for the Net Generation, university staff and administrators must first realize the depth to which technology has revolutionized daily life for us:

- ▶ **Plastic or plastic?** Cash is disappearing rapidly from our wallets, to be replaced by credit and debit cards. We use these cards for purchases in stores, to pick up tabs in restaurant, and even to swipe at drive-through restaurants. We pay our bills with them and do our shopping with them. In many cases, in fact, students will simply avoid establishments that refuse to accept them.
- ▶ **For customer service, press Ctrl+Alt+Delete.** Thanks to the marathon waiting times for customer service hotlines and the lack of tasteful elevator music, the Net Gen would much rather log on than call to fix problems or seek advice. Surfing Internet help lines for assistance solves two of our problems: speed and accessibility. It's much faster to find the solution in an online trouble-shooter, oftentimes, than to wait for an operator to read from a textbook. It's also more likely that online help can be found any day, at any time. There are no closing times online and no hours of operation.
- ▶ **Dear Dr. Jones.** It's not that we can't use the telephone or find an office, it's that it's just so much more difficult. Using e-mail to set up meetings, ask simple questions, or send in excuses for absences has become so commonplace in the modern classroom that few students turn to anything else. E-mail is less personal and less frightening. You don't have to worry about saying the wrong thing or getting flustered. You can carefully craft your message and spell-check

the result. It's much easier to take risks and push the envelope without hearing disapproval or confronting anger. For that reason, the Net Gen will turn to e-mail for everything from job inquiries and applications to meetings with administrators. (As a former college editor, I was shocked to learn that my reporters had even resorted to conducting interviews entirely over e-mail.)

- ▶ **ATTN: School's Closed.** When breaking news hits, students in the Net Generation are more likely to log on to a news Web site for the latest information than to turn on CNN. When we get dressed in the morning, we check WeatherBug or the local television's Web site for the day's weather prediction rather than wait for a forecast on the morning news. When we need information, we expect it immediately and seek it ourselves.

Implications

We aren't expecting, when we enter college, that campus will be the technological equivalent of a science-fiction movie. What we hope, however, is that student services will evolve alongside our own society to reflect the changes we have undergone as passengers on the Information Superhighway.

- ▶ **Cashless on campus.** It is unlikely on today's campus that a random wallet search of a hall of freshmen would reveal more than \$100 in cash. Instead, these students would say they only carry their debit, credit, or ATM card. By refusing to accommodate these students, universities place them in a perilous position, stripped of resources when they might need to pick up supplies, run a few copies, or purchase a meal on campus. A number of universities have caught on to the reality of a "cashless campus," installing ATM machines, allowing student ID cards to double as debit cards, or offering secure online transactions with credit cards. But some universities still fail to realize the needs of enrolling Net Geners. In the future, more campus services such as student ticket sales, printing kiosks, and campus eateries should accommodate debit or credit cards.
- ▶ **Immediate communication.** Because we have learned to seek and expect information at the touch of a button, it is simplest to disseminate information in a similar fashion. When inclement weather strikes, for instance, a mass e-mail will reach students before a ticker on the bottom of the local network news. Students will check their e-mail before class before they will check their voice-mail or a classroom door for notes posted there. School systems, therefore, must evolve to place less emphasis on phone lines or verbal communication

and more on using e-mail and Web sites for the rapid distribution of news, warnings, and alerts.

- ▶ **Constant access.** Whether it be news, shopping, or paying bills, technological advances have made it possible for the Net Gen to access services anytime, anywhere. They have grown accustomed to doing business after midnight or shopping after two o'clock in the morning. Late classes and schedules bulging with club activities, jobs, and study sessions often mean working late into the night. As a result, they have come to demand 24-hour access to university services such as health care, dining, Internet troubleshooting, and libraries. Whether in person or on the Web, current student habits demand a new evaluation of hours of operation and staff accessibility.
- ▶ **Face time.** The Internet has enabled faculty, students, and administrators alike to communicate with more people on a daily basis while only having to physically see a few. As an administrator once lamented, "I can help 30 students each day over e-mail exchanges, but I rarely get the opportunity to meet them." While some might assume the Net Gen loathes face-to-face interaction, the opposite is true. The constant glow of a computer screen and the cacophony of clicking keys has only left the Net Generation longing for more face-to-face interaction with faculty and administrators. Despite the ease of online communications, therefore, faculty and administrators must continue to make a concerted and sincere effort to offer real face time to students and to arrange meetings so that genuine, real-time discussions, which are often stifled online or over inbox communication, can occur.

Outlook for the Future

I arrived home in December to meet a sullen, unresponsive teenage boy: my brother. As I watched him plant himself in front of the computer each night and rush between chores to "check his buddy list," I couldn't help but pull rank.

"You know, in my day, we used to actually call our friends over winter break. And we had to actually have our friends over to play games, we couldn't just do it on the Internet," I said.

He rolled his eyes. "Right, right, I know," he said. "And your cell phones only made phone calls."

Suddenly, I felt quite old. The truth is, I haven't called a friend just to chat since my freshman year in college. But the technology that revolutionized my college experience has transformed my younger brother's middle and high school experi-

ence. The technology that captivated my imagination as a teenager is a “fossil” in his eyes.

The next generation of learners, therefore, will only raise more questions on college campuses. Their lives will be more reliant on technology, their attention spans that much shorter. They will have little concept of checkbooks and scant recollection of landline telephones. Their needs and their values will require a reevaluation of the concepts noted here and a fresh look at the needs and expectations of our nation’s college freshmen. By then, the Net Generation will be relics of the first generation of Internet youth, when the Web was still new, page loading still slow, and telephones still in use.

But I’ll just read about all that on the Internet.

Endnotes

1. Neil Howe and William Strauss, *Millennials Rising: The Next Greatest Generation* (Vintage Books: New York, 2000).

About the Author

Carie Windham is a senior studying history at North Carolina State University. When she is not Googling her own name or instant messaging her friends, she is active in student government, the University Honors Program, and the Center for Student Leadership, Ethics, and Public Service. While at NC State, she has been a member of Phi Beta Kappa and Phi Kappa Phi and recipient of the Park Scholarship. She spends her free time volunteering at Noah’s Landing, a nonprofit nature center, and plans to attend graduate school in Northern Ireland on a Mitchell Scholarship in fall 2005.