



Working with Generation-D: adopting and adapting to cultural learning and change

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Abstract

Purpose – The paper aims to discuss the expectations and needs of Generation Y students for higher education specifically targeting issues relating to libraries and library management.

Design/methodology/approach – The paper provides a brief overview of Generation Y personality traits and characteristics. This is followed by a discussion of organizational culture, explaining how to effectively adapt to meet the expectations of the Generation Y students. Two academic libraries' programs designed to meet the needs of the new learners are discussed.

Findings – The paper recognizes the need to address the challenges of the new learners from all levels of library management and provides strategies and programs to enable positive change within the library culture.

Originality/value – The paper highlights generational differences of current higher educational students and library staff and provides practical solutions to enable positive change within library organizational culture.

Keywords Organizational culture, Learning, Library management, Personality, Academic libraries

Paper type Research paper

Now entering stage center: “the net generation”

Look around today's college quadrangles. You cannot help noticing students tuned in with earbuds securely fastened, a laptop and PDA in their backpacks, camera-phone affixed to their belts. Campus life now includes: downloading lecture notes, viewing course videos and taking quizzes via class web sites; checking e-mail every 15 minutes, interacting with friends locally and globally courtesy of IM (Instant Messaging); blogging; MMORPGing (Massively Multiplayer Online Role-Play Gaming); downloading music/video files in MP3/M4A formats; sharing multi-megapixelated jpeg photos with online friends *vis-à-vis* highspeed Internet connections.

Who are these students? They are Generation-D: so-called digital natives, Millennials, the Net Generation or Net Gen for short; the first ubiquitous cohort of learners raised on and confirmed experts in the latest, fastest, coolest, greatest, newest electronic technologies on the planet.

According to a recent survey by EDUCAUSE, Generation-D employs abundant technologies for studying, social networking and “edutainment” (Kvavik and Caruso, 2005). Using technology in and out of the classroom provides multifarious benefits of convenience, connectivity and control in the learning process. However, this study also



found that specialized technological skills such as online-library searching, mandatory for numerous course requirements, concomitantly demands additional improvements from the service provider side. Moreover, EDUCAUSE discovered that the instructor's IT skills possess the greatest impact upon student engagement and learner satisfaction.

Therefore, to interface successfully with Gen-D, librarians, together with teaching faculty and staff, must adopt and become adept at key learning technologies themselves; in other words, educational facilitators must keep apace technologically with their students! To do so, first the organizational culture of librarians and educators needs to change.

Inside Generation-D

The beginning and ending dates defining the parameters of Generation-D vary from beginning dates from 1977-1982 to ending dates from 1994-2003. Most research identifies Generation-D with the birth of the PC in 1981 and the end with September 11, 2001. Estimates of the size of the group vary as well with figures ranging from 73 million (The Millennials, 2004) to 100 million (Howe and Strauss, 2003). Regardless of the definitive figure for the population of Generation-D, all normalizing population guesstimates reflect that this generation is the most influential generation, at least in terms of size, since the Baby Boomers.

Generation-D is not the only name for people who fall within the birth date parameters of this demographic group. Other frequently used monikers for this cohort include: Net Gen, Millennials, Generation Y, Newmills, Nexters, Thatcher's Children, Generation Next, Echo Boomers, and Digital Generation. Members of Generation-D generally do not cotton on well to labels, but if they must choose a generational title to describe themselves they prefer Millennials or, yeah: Generation-D or Net Gen (Sweeney, 2005).

Howe and Strauss (2003), identified seven core traits reflecting the general personality characteristics of Generation-D. These traits are: special; sheltered; confident; team-oriented; conventional; pressured; and achieving. The first three traits are inextricably linked to the parents of Generation-D who are typically nurturing to a fault and personally and have financially invested in their children, earning the title, Helicopter Parents, for their frequent and intense involvement or hovering in many aspects of their children's lives. Since early childhood, Generation-D kids have been socializing in groups in the forms of daycare, play groups and preschools. Group interaction is continued by primary and secondary education where collaborative learning is an important pedagogical strategy. Because of the close and positive relationships most Net Gens have with their parents, the children of the Boomers share many of their parents' values and perceive a smaller generation gap than usual between themselves and their folks, resulting in general acceptance of existing standards or conventions. This does not necessarily mean that the members of Generation-D are satisfied with the status quo when it comes to their individual goals and achievements. Generation-D is an accomplished group with SAT scores at an all-time high since 1974 scores (Howe and Strauss, 2003).

Net Genners feel internal and external influences to perform at the very highest levels, and they manage to achieve success, whether that success comes in the form of athletic, academic, financial, social, or whatever form. Jason Frand, Assistant Dean and

Director of the Anderson School of Management at UCLA, created a list of expectations, beliefs, and behaviors of the members of Generation-D (Frand, 2000). These qualities include the belief that technology is important but that computers are not obligatorily considered technology, since they have always been a part of their lives. Examples of technology would include recent advances along the lines of such innovations as: Podcasting, Blue Tooth, RSS, Wi-Fi, and a multitude of ring tones from TV's Family Guy to the latest pop hit. Other mindset criteria for Generation-D include the preference of using the Internet (web browsing) over television watching; the ability to perform difference activities at the same time (multitasking), and staying connected. Generation-D students often listen to a lecture while checking their E-mail and text-messaging their friends. Frand (2000) contends that Gen-D students would rather type than write anything by hand. Because information is constantly changing, what a Gen-D person can do is considered more important than an accumulation of knowledge that may soon become obsolete (Frand, 2000).

Generation-D members are gamers and as such are used to trial-and-error as a way to get to the next level whether the next level is found on the latest version of Halo or life in general. With the advent of digital manipulation of images and data, Generation-D members may have difficulty discerning reality from fabrication even though they are more fluent in visual literacy than any other generation. Patience is not one of the virtues of Generation-D as they are used to instant gratification and have zero tolerance for delays. Finally, Frand (2000), states that: Generation-D students are well aware of branding as they have been aggressively pursued by advertisers and marketers since early childhood. As a result, Generation-D people know the power of being a consumer and will switch to any competing brand that meets their needs. A consequence of a life lived within a bubble of brands and consumerism is a blurring of ownership. Many Gen-D students confuse processes like cutting and pasting with creating, finding with production, and/or buying with the nuances of ownership. Rationalizations heard frequently include: "Why should I rewrite something I agree with – just click on the link and read the original;" "I found this web site so I decided to use it;" or "I bought this so the information belongs to me." They are unapologetic digital cognoscenti, connoisseurs: Digerati.

"Old school:" organizational culture

Scholars introduced the concept of organizational culture in the early 1960s from organizational psychology. It gradually integrated influences and input from several sciences, including anthropology, sociology, social psychology and organizational communications (Schein, 1990, 1996a). Due to its interdisciplinary nature however, there is scarce consensus amongst scholars regarding organizational culture's central tenets, key concepts, methods of observation, standard metrics or even its very definition.

In general, culture is the personality of any living, vital organization. Culture comprises the core attitudes, assumptions, values, beliefs, behaviors, codes, norms, taboos, and even artifacts shared collectively by members of a cohesive group. Culture is shaped by its organizational underpinnings – its founders, leaders and role models; its myths (literally, "the stories we tell one another and their corresponding rituals we enact to survive"); its complex history, philosophy and technologies; finally –

organizational culture is a unique environmental construct in and unto itself (Bennis, 1989). Following is a useful working definition.

(Culture) is a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to these problems (Schein, 2004).

It is far from clear about the relationship between organizational cultures and their effectiveness. However, there is no denying their impact. Culture, directly or indirectly (but indubitably), influences how individuals and groups think, act and respond within organizations. Since culture is so deeply embedded, rooted and entrenched in the life energy of all complex organizations, changing an organization's culture can be a daunting challenge at best, a near-to-impossible pipe dream at worst.

Organizational culture change and today's learning

Given the rapid alteration of our collective information landscape, the learning styles of our customers and the nature of library operations, usage patterns of library resources have steadily evolved from library-centric to a joint interaction between the library and its patrons over the past decade. The traditional library culture stressing stability, rigidity, rules and control contrasts sharply with the preference for flexibility, convenience, personalization, simplicity and mobility, portability characteristic of NetGen clientele, and as offered by such burgeoning technologies as the web, with its myriad hardware and software offspring. Many libraries and librarians have recognized these fundamental changes and some have further undergone a series of organizational developmental processes to adapt and cope with the new realities.

Holloway (2004) surveyed 31 academic libraries that have implemented organizational development to improve overall performance. She found that changing organizational culture is one of the goals as well as motivations of their endeavors. In addition, technology is identified as one of the primary drives for libraries to change. In another article, Kaarst-Brown and Nicholson (2004) pointed out the strategic value of organizational culture in every organization's continuing performance and success. They further explored the applicability of using the "Competing Values Framework" to assess a library's culture, as well as to facilitate cultural change and organizational transformation. In yet another article, Giesecke and McNeil (2004) described the process and efforts in instituting the value of learning in their culture at the University of Nebraska-Lincoln Libraries.

Transforming the culture of an organization is a very complicated, difficult, and time-consuming process, especially for a mature organization (Schein, 1999). However, at a time when the external environment is changing evermore swiftly, organizations can ill afford not to learn, adapt, and adjust in order to survive and grow. In his book on cultural learning and change, Schein (1999) provides clear guidance in managing and inaugurating the transformation. Strategies in managing change include:

- *Leadership vision*: As Schein (1993) explains, "one cannot ask others to learn something new if one has not learned something new oneself". The change initiative has to come from the leader of the organization. The leaders need to acknowledge the imperative for change in the organization and have to become

learners themselves; otherwise this transformation will never occur or succeed (Coutu, 2002).

- *Anxiety management*: Changing and unlearning old values and beliefs can be threatening and disturbing. Schein suggests the implementation of an “unfreezing” system to disconfirm the old ways and to create the motivation for change: Setting up a psychological safety environment; offering opportunities for training and practice; providing supports, coaching, rewards, and encouragement; legitimizing making mistakes – experimenting and taking risks.
- *Parallel learning systems*: Create a temporary learning system where new assumptions can be practiced and tested. Involved in this testing ground is a task force that will lead and manage the change process within the organization. The task force might consult other organizations, undergo training and learn the process themselves, as well as bring in organizational development consultants. This system provides and encourages opportunities for conversation, conversion and reflection upon issues critical to the future of the organization (Schein, 1993).
- *The learning process*: Based on “new norms” developed, the task force can begin to design learning processes for the whole organization, setting up change targets, developing a transition plan, creating a set of subgroups that focus on specific aspects and areas of the complete learning process, while identifying change leaders and agents.
- *Organizational education*: Foster change in the “technological classroom;” teach teachers not to fear new technologies. Coordinate and implement programs and plans developed by the task force and its subgroups.
- *Dialogue*: According to Schein, dialogue is the root of all effective group action and resides at the center of the whole learning and change process (Schein, 2003). Throughout this course of changing the culture, the task force needs to assure a free flow of communication across all different subcultures within the organization (Schein, 1996b).
- *Continuous learning*: External change will not cease as the organization goes through its transformative journey. Learning is a non-stop exercise as an organization’s health improves. Its leaders need to ensure new processes are reinforced, constantly reinvigorated and unceasingly reviewed.

Future tense versus future relaxed – experiences at denison memorial library

In recent years, the staff at Denison Memorial Library of the University of Colorado at Denver Health Sciences Center has been experiencing a roller coaster ride of changes. At the institutional level, in June 2004 the University Board of Regents approved consolidation between the Health Sciences campus with the University of Colorado at Denver campus. At the same time, the Health Sciences campus is in the midst of undergoing a multi-million-dollar project to build a new campus and have every facility moved from the current site to the new campus by 2008. The new library building, twice current size, is scheduled for unveiling come summer 2007. Preparation for the move ranges from weeding collections to consolidation of services, including merging three public service points into a single service desk.

Internally, four of the library's administrators, consisting of the deputy director and three department heads, announced their retirements in 2003. Although the four positions were filled within a year's span, there were serious adjustments and structural changes to overcome.

At the same time, like the majority of academic libraries, Denison is faced with numerous confrontational obstacles in its swiftly mutating higher educational environment. Such challenges include but are not limited to: Diminishing purchasing power resulting from declining institutional resources and spiraling materials costs; swift advances in information technologies; less-visible, but more diverse and demanding patrons; a graying library workforce; and more technology-savvy, web and media-driven NetGen students. The shifts in learning styles and skyrocketing interdependence upon the latest technologies matched with correspondingly compatible teaching modalities, either demanded, fomented or mandated by Generation-D, or – simply imposed (unopposed) by “curricular injunction” upon them, are further observed in:

- The requirement of a PDA and laptop computer for all incoming medical and dental students, bar none.
- The demand for and implementation of wireless web access campus wide.
- Fueled by a recent library survey, off-campus access now accounts for 68 percent of graduate student “visits” and 75 percent of all undergraduate student logins to the library's web site.
- All class materials needed by dental students are now distributed via CD-ROM.
- Demands from student groups to add more electronic resources accessible remotely are the grounds for Denison's majorly revamped policy: We now subscribe, sans exception, to online titles exclusively, and we have converted our printed journals to their online counterparts wherever doable. Outcome: more than 95 percent of Denison Library's materials budget is now spent wholly upon electronic resources.

To assist our employees, each and every person, conjoined with our crucial patron population whom we serve and protect, comprised of Generation-D people and everyone else notwithstanding, in coping effectively with such incredible deluges and influxes of organizational, technological, and environmental alterations, Denison's new Deputy Director instituted a working group, called the Futures Committee, in late 2003. The mission of this committee is to “create and sustain an active library-wide dialogue about future opportunities and challenges.” With participants from all departments, the Futures Committee is charged with: Identifying areas for discussion, planning relevant programs, inviting speakers, holding debates, organizing journal clubs, facilitating conversations, and organizing monthly brown-bag seminars. A “Futures Blog” site was even set up as a forum for information sharing, opinions exchange, and extended discussions/debates.

The first program launched by Futures concerned mixed generations in our workforce. An analysis found that the generational breakdown of our current library staff is: 15.2 percent Traditionalists (aka Matures; those personnel generally born prior to 1945); 65.2 percent Baby Boomers (born roughly between 1945 and 1960); and 19.6

percent Gen-Xers (born between the early 1960s and the early 1980s), but tellingly – no NetGens yet.

The issue of how to serve disparate generations of patrons, especially the growing arrival of NetGen on campus, has been raised repeatedly in our discussions. Consequently, the committee launched a follow-up program on emerging and transforming technologies, that might just significantly affect the ways and means whereby our patrons work and access library resources and we. These programs include demonstrations as well as discussion sessions directly linked to various new web technologies and services, including devices, such as: Zoominfo, Google Map, RSS, Folksonomy, the PDA, the Tablet PC, and the Ipod. Futures has further begun sponsoring a weekly contest based on who can come up with the most clever and perspicacious definition to encompass emerging technologies like text messaging, “smart mobs,” “short messaging services” (SMS) and “WiKi.”

A third program features “show-and-tell” sessions, of “gadgets” actually owned by staff members, librarians and other library personnel and administrators. Devices demonstrated so far have included “smartphones,” the Blackberry, the Video Ipod, and other new, vanguard, digital thingamajigs enormously popular with Gen-D.

By donning an informal and engaging approach to the behemoth challenge of coping with change between libraries and NetGen, the Futures Committee has created a non-threatening and contributory process for raising staff member awareness and interest in new technologies and how they are used by Generation-D. Futures also encourage library staff to embrace innovative and creative ways for applying new technologies in their own work. Resultantly, such endeavors are engendering a climate fostering: Learning, sharing, experimenting, risk taking, and accepting challenges and changes.

Pursuit of excellence – experiences at Pius XII Memorial Library

At Saint Louis University, services focusing on technology usage in the classroom as well as services designed to interconnect with NetGen students include:

- *The 60 Minute Technology Series*: Co-sponsored and conducted by librarians, instructional technology specialists and IT experts, these hour-long seminars target topics of interest to both faculty and graduate students. Past sessions involving librarians include presentations on plagiarism, deep-web searching, electronic reserves, interlibrary loans, academic integrity and copyright issues.
- *Summer/winter institutes and workshops*: These institutes, co-sponsored by the Center for Teaching Excellence and the ITS department, provide faculty an opportunity to present their shared learning experiences related to emerging learning technologies, and their shared success stories linked to these technologies. Most recently, librarians who have regularly participated in the faculty institutes are now working with the Center to promote intercooperative incorporation of WebQuest technology into the undergraduate curriculum.
- *U101 instructors*: Every first-year-entering student is encouraged to enroll in “University 101” during their initial semester on campus. These small, interactive classes comprised of approximately 20 students are dialoguing in and out of the classroom, as students learn more and more about their transition to college and become comfortably acclimated to the SLU community. For the past

three years library faculty have been primary instructors in the U101 program. The class offers invaluable opportunities to forge positive relationships with incoming NetGen learners.

- *Research Assistance Programs (RAPs)*: The stated purpose of a RAP is to teach students and faculty how to identify and utilize a wide range of library resources including state-of-the-art electronic ones relevant to particular research needs. The individualized sessions are typically held one-on-one and last on average one hour apiece. Liaison librarians are available by appointment for individualized consultations, or private “RAP sessions,” to provide in-depth research assistance. RAPs empower students to interact with librarians, faculty and each other on a very informal, very personal level, one of the chief philosophical mindsets of Generation-D.
- *Class auditing and/or observation*: Reference librarians are required and encouraged to sit in on at least one undergraduate class in their liaison area(s) per academic calendar semester. Seeing students on a weekly basis in their classroom environment helps forge positive, personal relationships between librarians and students. Gen-D students have commented frequently that this practice encourages them to seek out their “personal librarian” when they have information needs or simply have an assignment due requiring library support.
- While the above student services do not rely solely on the latest technology to achieve their professed aims, they do reinforce the key importance of interacting closely with Generation-D. Learning becomes effectively “a multi-way avenue,” with librarians, faculty and NetGen students alike learning and sharing new ideas and insights with one another in a safe, cooperative and informal environment of “coequals.”

Moving forward – Generation-D and its ramifications for higher education

The Millennial (NetGen, Gen-D) student, first of his and her sui generis generation to be pampered, parented, preened, prompted and promoted in the domestic cradle, not dominated by printed books, Crayolas, Lincoln Logs® or old-fashioned board games; but rather personal computers, video games, MTV, e-mail, and the world wide web; Generation-D are – by the time they are of schooling age – much more familiar with Google than a library’s online catalog or various subject databases. Gen-D is far more proficient and comfortable, browsing the library’s web site and accessing online resources through hypertext links from their laptops, than manually slogging through mountain-high book stacks searching anxiously and impatiently for print-media items using Library of Congress Classification numbers in an old creaky library building, up on the 4th floor mezzanine, reeking of ancient paper and silverfish droppings.

Generation-D prefers interactive, hyper-linked multimedia over the traditional static, text-oriented printed items. They want a sense of control; they need experiential and collaborative approaches rather than formal, librarian-guided, library-centric services.

As the wave of Generation-D students commences to flood our campus with very different learning backgrounds, experiences, preferences, attitudes and skill sets, libraries and librarians are facing head-on the challenges of meeting their special needs and expectations. It is eloquently stated by Lippincott (2006) that, “there is apparently a disconnect between the culture of library organization and that of the NetGen

students". The greatest challenges to us are not only the ever-more encompassing and omniscient resources available on the Web, but also the widening cultural difference extant between librarians and our new patrons.

As the seismic, paradigmatic shift of higher education from a traditional teaching- and service-based culture to a learning culture unfolds before us like a butterfly magically realized from an unimpressive, even-ugly cocoon, libraries are literally playing catch up to meet the learning pattern changes of today's newest wave of students, NetGen, Generation-D, the Millennials. Locally, libraries have moved beyond dusky, dreary study halls packed with back-to-back carrels, to vibrant, imaginative, architecturally-creative, stimulating, well-lit, capacious learning spaces which promote creative mixing of molecules in a rich, technologically-outfitted, fertile playground of stimulatory study and learning (Bennett, 2005). Libraries have converted book stacks and study cubicles into Information or Learning Commons, with wide-open and bright space, rows of workstations (no waiting lines) and group collaboration areas. Multimedia labs equipped with scanners and other audio-visual equipment hooked up to computers are configured and ready to go for media production. Wireless connections are now available throughout all campus buildings and the complete campus itself. Dining Internet Café style, popular at bookstores already, is being set up in libraries now as a way to domesticate the library space; i.e. neutralize the authority images of librarians and faculty; making the library look more-and-more like Generation-D's home away from home, with the rich, value-added advantage of human experts (librarians and faculty members) just a "scone's throw" away, at the "beck and call" of NetGen. Furthermore, "the library cum 'domestic gardens'" also draws students into the library and entices them to stick around longer (Bennett, 2003).

The future of Generation-D

As Generation-D ages, college campuses will feel their influence. The learning expectations formed and evolved in Gen-D primary and secondary school experiences will carry forward to the halls of higher education. An understanding of Gen-D personalities and expectations can translate into successful pedagogies and learning-style strategies, providing insights for designing effective learning environments. Reviewing the first three of Howe and Strauss (2003) and seven core traits, special, sheltered, and confident students require structure and expect to do well. In order to meet these needs, university administration and staff will need to provide well-defined parameters, policies and procedures, as well as deadlines. Within the classroom, faculty needs to supply detailed rubrics, syllabi, and tutorials in addition to providing concrete examples and deadlines. If the Gen-D student expectations are not met, the university should be prepared to answer to "the Helicopter Parents." Examples of intense parental involvement in higher education are frequent communication between parent and student, communication between parents and college administrators, and even communication between parents and student faculty.

In an effort to discourage "Helicopter Parenting," Colgate University sends literature educating parents of Colgate students about appropriate involvement with their children attending the university (Belt, 2005). A number of faculty members at Saint Louis University have received phone calls and e-mail regarding the academic progress of individual students. Parents have called the main library at Saint Louis University to inquire about availability of textbooks for their children and have even

called to request audio books pulled for their children to listen to while the students drive home during semester break. It is not uncommon to see Generation-D undergraduate students walk around campus with a cell phone attached to an ear, as if the device were an extension of the human body itself. Many NetGen students are speaking to a parent on a daily basis.

In terms of pedagogy, Generation-D students thrive with experiential learning. Hands-on and interactive assignments and in-class activities mesh well with the Jason-Frand-identified metaphilosophy of staying connected and engaged (Frand, 2000). Along the lines of connectedness, teamwork is the first choice of many Gen-D students with regards to learning and working in a classroom. Collaborative presentations and assignments address this expectation. Keeping NetGenners connected and engaged is also accomplished by making class material relevant, exciting, new, salient and germane. Gen-D students are socially conscious and want to make a difference. Because the new learners are visually literate, classroom environments abundant with images are preferable to text-intensive overhead projections. Gen-D students have grown up with Howard Gardner's theory of multiple intelligences and are acutely aware of the strengths and weaknesses of their individual learning styles. Faculty needs to provide instruction to take into consideration not only visual learners but kinesthetic, interpersonal, intrapersonal synesthetes; linguistic, musical, spatial and naturalistic learners must be factored into the higher-ed equation too.

In their individual quests for excellence and their discriminating consumer savvy, Generation-D students seek information. This searching of information, used to supplement knowledge, solve problems, make informed decisions, and enhance everyday life, is referred to as "informal learning" and Gen-D students are masters when it comes to collecting information and learning from peers or the online community (Oblinger and Oblinger, 2005). Because Generation-D students are adept at informal learning, many students feel little or no training is needed to transition to traditional learning processes found in formal educational environments. As a result, typical Gen-D students entering colleges feel adequately equipped to handle the challenges of scholarly research and expect few speed bumps in the road to academic success. Add other Gen-D preferences and expectations such as confidence, experiential learning, immediacy, and confidence and you have students entering the academy with high hopes and high needs.

A common thread connecting the different expectations of Gen-D and the University is technology. The higher educational experiences from the first week of freshman orientation to the final week before graduation should be surrounded by a seamless and invisible infrastructure of advanced technology. Generation-D students use technology and expect technology to work whenever and wherever they require. However, according to Diane Oblinger, Vice president of EDUCAUSE, the actual technology is not as important as the activity enabled by the technology (Oblinger and Oblinger, 2005). Technology for technology's sake is not considered an effective use by Gen-D students. Technology to enhance and complement the learning process is an effective use of technology. Wi-Fi, PDA zones, course management programs, WebQuests and PowerPoints are only as important as their usage and content. It is imperative that the university community has appropriate tools, training and support to provide necessary services for its ever-expanding NetGen student base.

Google-styled, federated search engines combined with link resolvers make Generation-D patrons' discovery processes more efficient and effortless than only a few years prior. "MyLibrary" and other customization capabilities, coupled with e-commerce features such as online requests/renewals, RSS feeds, content customization and online document delivery enable our patrons to conduct research much more effectively than ever dreamed before. Virtual reference, instant messaging (IM) and e-mail offer patrons a variety of options for interacting with librarians and receiving personalized services, on Generation-D's terms.

Finally: Academic libraries, a critical element in the learning adventures of Gen-D students, need to be proactively involved in, and contribute to, the campus transformation. Under intelligent campus leadership, libraries should revisit their organizational cultures and every aspect of their services. Furthermore, libraries need to make an effort to understand more about, and communicate openly with, Generation-D learners. From partnerships with them in the planning, redesign, and improvement of library facilities, services, and collections, through learning and changes at every step of the higher-education ladder, libraries will grow with today's Generation-D kids, paving the way for tomorrow's next generation. Perhaps university libraries, in conjunction with the current NetGen, will host a contest to name the next generation of avant-garde digerati. Onward!

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Further reading

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