Richard N. Katz, Celeste M. Schwartz, James Phelps, Damian Doyle

The EDUCAUSE Awards Program, under the guidance of the EDUCAUSE Recognition Committee, brings peer endorsement and distinction to professional accomplishments in higher education information technology.

The Leadership Award is the association’s highest recognition and honors exemplary leaders whose work has had significant positive impact on advancing the theory and practice of information technology in higher education.

The Community Leadership Award recognizes members for their roles as community leaders and active volunteers in professional service to the broader higher education IT community.

The Rising Star Award spotlights rising higher education IT leaders whose records reflect ongoing and exceptional growth in contribution to the profession and increased levels of leadership and responsibility.

Moran Technology Consulting, an Educause Gold Partner, is once again proud to sponsor the recognition of visionary IT leaders who are addressing today’s ever-changing campus realities and transforming the strategic role of information technology across higher education.
The 2018 EDUCAUSE Leadership Award is given to Richard N. Katz, Founder and Principal of Richard N. Katz and Associates, to recognize his extraordinary leadership and contributions to the IT profession and the greater higher education community. Richard's impact not only has shaped the direction of information technology in higher education but also has influenced the careers of generations of IT professionals and aspirants in the United States and around the world.

In his early career, Richard advanced through the ranks at the University of California’s Office of the President, culminating in his appointment as Executive Director of Business Planning and Practices. His broad experience in the management of financial, IT, and administrative services laid the groundwork for the future work he would do as a strategic thinker and leader for both CAUSE and EDUCAUSE. Under his leadership, the University of California received international recognition for innovations in accountability, capital programs, human resources and financial accounting. Richard received numerous awards including the Olsten Prize for innovation in 1986. In the footsteps of UC President Jack W. Peltason, Richard became the second recipient of UC’s Award for Innovative Management and Leadership in 1996.

While Richard was widely known throughout UC and through his many speeches and publications as a volunteer with CAUSE, Educom, and NACUBO, many in the IT community got to know him best as vice president of CAUSE, the organization that merged with Educom in 1998 to form EDUCAUSE. Richard was, in many ways, the face—perhaps even the heart and soul—of CAUSE, and his genuine passion for the work of the association led many IT leaders and staff to find a professional home in CAUSE. As vice president at EDUCAUSE after the merger, Richard continued to cultivate EDUCAUSE as a member-driven organization, demonstrating his mastery in community building. Richard took pride and pleasure in catalyzing connections between people and organizations that might not otherwise find each other. He was a kindling force in all aspects of the growth and development of EDUCAUSE; his executive oversight included the EDUCAUSE annual conference, *EDUCAUSE Review* and *EDUCAUSE Quarterly*, and the association’s technology operations, professional development, corporate relations, and research. Richard's leadership provided EDUCAUSE a solid foundation for its continuing growth in its conferences, publications, and corporate relations functions. Among his most significant contributions to EDUCAUSE was his founding of the EDUCAUSE Center for Applied Research (ECAR), the research arm for the association to study the management, use, and impact of information technology on higher education and to provide colleges and universities with practical information to support their decision-making.

Following his fourteen years with CAUSE and EDUCAUSE, Richard has worked with trustees and regents, policy makers, faculty leaders, and staff in university systems and all segments of higher education throughout the United States and internationally. He has made a significant contribution to higher education through his extensive service on a number of corporate, university, and association governing and advisory boards, including those for Ashford University, the Corporation for Education Network Initiatives in California (CENIC), the Ellucian Executive Advisory Council, the IBM Higher Education Policy Council, the New Media Consortium (NMC), and the Syracuse University School of Information Studies. He has generously shared his expertise by delivering more than 200 keynote addresses and has written or edited seven books—including the groundbreaking *Dancing with the Devil* (1999) and *The Tower and the Cloud* (2008)—and more than 75 articles, monographs, and book chapters. Richard’s videos “EDU@2020” (2007), “EDU@2025” (2012), and “Edifice Rex: The Place of Place” (2014) are examples of how his work transcends information technology to raise awareness of higher education’s role in building lives of impact.

Richard N. Katz personifies what it means to be a leader, visionary, innovator, scholar, and entrepreneur in higher education, and he is most deserving of the EDUCAUSE Leadership Award. He has been both a beacon and a bridge-builder in our community, and his influence is evident in the many individuals and institutions that have benefited from the wisdom, guidance, and inspiration he has provided in his capacity as an advisor to higher education.
“The emperor is in his dressing room.”
—Hans Christian Anderson, *The Emperor’s New Clothes*
As a young graduate student in history in the late 1970s, I was deeply influenced by David Landes's 1969 book *Unbound Prometheus*, a history of technological and social change during the Industrial Revolution. Landes's framework describing the interplay of functional need, technological innovation, and behavioral response has shaped my outlook over the ensuing 40 years.

As an IT professional, I have watched this interplay repeat itself as waves of new technologies arrived on campus. Each new wave seemed to carry with it an obligation for technology leaders and practitioners to reinvent their wardrobes, if not themselves. Every new wave signaled a shift in the required skill set and outlook of those who lead the organization and deployment of information technology.

We can metaphorically imagine the white lab coat–clad mathematicians and engineers who dominated the landscape from the mid-1940s through much of the 1970s. Thin ties, pocket protectors, horn-rimmed glasses, and Hush Puppies helped define the software engineer of the 1970s. The broad introduction of personal computing in August 1981, the spread and interconnection of networks, and the deployment, by the mid-1990s, of HTML, URI, and HTTP brought computation and communication to the office and, increasingly, to the home. The simplification and standardization of web search by Google created the preconditions for a revolution in work, commerce, and everyday life. Wardrobes became nearly as diverse as IT professionals. Larry Ellison, it was noted, wore Armani while Steve Jobs will be remembered for wearing blue jeans and his signature black turtleneck. As the titans of technology conquered each challenge of the OSI’s 7-layer model, information technologies moved from the glass house of enterprise mainframes to everyone’s house. The release of the iPhone in 2007 placed computational power and ubiquitous connectivity in everyone’s pocket.

Every challenge posed in the OSI model was met with a technological innovation. Every innovation, in turn, begat widespread social and behavioral responses—some intended, some unintended. Clayton Christensen and others introduced language and analysis around the notion of disruption—the modern phraseology for this matrix of social and behavioral response. As software applications—like spreadsheets—became refined, entire professions were recast. As search and presentation technologies matured, great libraries became accessible over networks. As worldwide networks were connected and as English became the world’s unofficial language of business, international-scale collaboration became widespread. And as connectivity became truly universal and mobile, core aspects of how we live, learn, interact, work, and do business have shifted.

**Wardrobe Changes**

While computation and communication continue to have deep and demanding technical challenges, the roles of the IT leader and organization have evolved. This is particularly true in higher education. Outside of computer science departments, IT leaders are no longer the “tinkerers-in-chief”—the inventors of new technologies. As they move their locus of operations increasingly to the cloud, IT leaders also rely less on their engineering sophistication. In broad terms, IT leaders have moved from making things, to running things, to socializing things. As leaders position themselves to play leading roles in socializing technology-enabled change, the question of wardrobe arises again. What are the clothes—that is, the skills—that tomorrow’s IT leaders will need? Are the challenges of socialization so vastly different that yesterday’s IT leaders will in fact have no clothes to suit? Is the IT leadership cadre ripe for a total makeover, or—like Google, Facebook, and others—will we need to find ways for technologists, marketeers, and increasingly, ethicists to share a clothes rack? Will IT leaders be accountable for technology’s socialization, or will provosts, deans, business officers, and others play decisive roles?

According to writers for *Forbes*, the *New York Times*, and McKinsey&Company, among others, today we are all living in the Age of Big Data. IDC predicts that by 2025, the world will create and replicate 163 zettabytes (163 trillions of gigabytes) of data annually. This represents a tenfold increase over the annual amount of data generated in 2016. The social and behavioral landscape associated with the technologies defining the Age of Big Data will demand a radically new set of skills among IT leaders and in the IT organization of the future (see table 1).

While the entries on this list of possible priority challenges could be argued, clearly these challenges—and others that could replace them—bear little resemblance to the OSI’s 7-layer challenge model of the 1970s. While the engineering and technical challenges of information technology will never go away, they are increasingly tucked in the realm of making things faster, more reliable, cheaper, and easier to use. Moreover, while many technical responsibilities are becoming more focused on incremental improvement, many are also migrating to corporate research and development organizations and to cloud providers who are leveraging nearly unimaginable scale economics and security capabilities.

**When the Anchor of Truth Disappears; or, Seeking Questions Hidden by Answers**

Remarkable people have opined on the nature and purpose of the university. Thomas Jefferson argued that universities exist to form “the statesmen, legislators and judges, on whom public prosperity and individual happiness are so much to depend.” William Harper, the founding president of the University of Chicago, stated that the mission of the modern university is to “maintain for democracy the unity so essential for its [democracy’s] success.” Thought leadership, the search for truth, and Woodrow Wilson’s spirit of service are the pillars that have both supported modern higher education and imbued the university enterprise with special
We should recall that the search for truth both drives academic inquiry and underpins its skepticism. It spans the disciplines. The mathematician Blaise Pascal advised, “Nothing gives rest but the sincere search for truth.” B. H. Liddell Hart agreed: “The search for truth for truth’s sake is the mark of the historian.” Linus Pauling described science as “the search for truth,” while Alwar Balasubramaniam identified artists as “the root of a tree. They can search for truth or reality in their own way.” This search for truth is the glue that holds the disparate elements of academic inquiry together and is the basis of mutual comprehension, purpose, and respect across diverse academic disciplines.

If the university is a servant of the truth, a beacon of the truth, a sanctuary of truth seekers, and an enabler of future generations of truth seekers, what will happen if the anchor of truth disappears? More specifically for us, what is the role of information technology and of IT leaders in protecting, preserving, or even extending what the theologian Cardinal John Henry Newman described as the university’s role in teaching students “to think and to reason and to compare and to discriminate and to analyse”—that is, to separate the true from the “fake”?

There can be little doubt that truth is under assault or that the pace of this assault is being conditioned (or

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Table 1. Challenge and Response: Prometheus Today

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<th>Challenge</th>
<th>Response</th>
<th>Disruption</th>
<th>Skills Needed</th>
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<td>Prediction and Personalization</td>
<td>Analytics</td>
<td>Changed capacity to manage institutional, organizational,</td>
<td>Ethical leadership</td>
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<td>Big Data Management</td>
<td>and individual performance and learning outcomes</td>
<td>Capacity to shape and instantate a service philosophy</td>
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<td>Cloud Computing and Storage</td>
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<td>High-Performance Networks</td>
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<td>Adaptive Courseware</td>
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<td>Rapid Prototyping</td>
<td>3-D Printing</td>
<td>Changing economics of design and manufacturing</td>
<td>Management of IT security</td>
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<td>Consumerization of “making”</td>
<td>Oversight and governance of institutional connectivity standards</td>
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<td>Remote Control</td>
<td>Internet of Everything</td>
<td>Most human activity now assuming connectivity between people and smart “things”</td>
<td>5-G and beyond mobile network architectures</td>
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<td>Supply Chain Management</td>
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<td>Identification, tracking, authentication, and authorization of “things”</td>
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<td>Human-Machine Interaction</td>
<td>Artificial Intelligence</td>
<td>Widespread changes to significant aspects of institutional work and program</td>
<td>Legal and ethical leadership (community standards, disclosures ...)</td>
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<td>Natural Language Processing</td>
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<td>Governance of IT</td>
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<td>Robotics</td>
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<td>Augmented Reality</td>
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<td>User awareness building</td>
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<td>Virtual Reality</td>
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<td>Ecosystem management</td>
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<td>Nurturing Communities</td>
<td>Social Networks</td>
<td>Alignment of institutional information resources and practices with the institution’s beliefs and policies about truth, academic integrity, diversity of ideas, intellectual “safety,” etc.</td>
<td>Legal and ethical leadership</td>
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<td>Governance</td>
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<td>Promotion of information literacy</td>
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<td>Codes of Conduct</td>
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<td>Establishment and enforcement of community standards</td>
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<td>Filtering, Screening, and Vetting</td>
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<td>Capabilities</td>
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<td>Community and Asset Protection</td>
<td>IT Security Infrastructure</td>
<td>Reconciliation of community safety and security with privacy rights, openness of infrastructure, and information resources</td>
<td>Legal and ethical leadership</td>
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<td>Surveillance Technology</td>
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<td>Deep listening</td>
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<td>Data management, including responsibility for record retention, access control, and preservation</td>
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constrained) by information technologies. As the professor and philosopher Marshall McLuhan warned: “The more the data banks record about each one of us, the less we exist.” His friend John Culkin reminded us: “We shape our tools and thereafter they shape us.” As we have moved from McLuhan’s typographical age deeply into the electric/electronic age, more and more of his concerns and predictions have shaped our environment.

McLuhan was never more correct than when he cautioned: “A point of view can be a dangerous luxury when substituted for insight and understanding.”

Modern 7x24 newscasting became the canary-in-the-coal-mine social response to challenges overcome by a variety of technologies. The former Fox News host Bill O’Reilly inspired Stephen Colbert’s “truthiness” punditry, which was based on the belief or assertion that a particular statement is true based on one’s intuition or perceptions without regard to evidence, logic, intellectual examination, or facts. The New York Times columnist Farhad Manjoo, in his 2008 book True Enough: Learning to Live in a Post-Fact Society, opined that many of us have begun to organize ourselves into echo chambers that harbor diametrically different facts—not merely opinions—from those of the larger culture. Modern social networks put an ominous accent on McLuhan’s warnings about the dangerous side of individual viewpoints. Bogus virality on social media enabled the reputation-damaging PizzaGate scandal and the Russian planting of divisive posts on Facebook in 2016. In the summer of 2018, more than 20 people were lynched by mobs in India as a result of child-abduction rumors spread via WhatsApp. In July the social media app was modified to reduce the pace of forwarding messages. Online mobbing and storming have also led directly to the editorial repudiation or scrubbing of articles in the Business Insider and The Nation. In July 2018 the actress Scarlett Johannsson “respectfully withdrew” from a controversial film project in the wake of a forceful Twitter storm.

IT leaders—for a time—flew below the radar on issues like these. While they led institutional efforts to acculturate incoming students to net citizenship, shaped network bandwidth, opened or closed ports, and filtered content from dubious sources, IT leaders preferred to think of themselves as network providers. Such providers, they reasoned, bear little responsibility for the content or community behaviors that travels across the institutional networks. But as we have all witnessed with the recent market drubbing of Facebook, providers of social networks are now at the center of debates about the ethical and appropriate management and uses of information technologies and content. Though IT leaders do not want to become the thought police for higher education, they can no longer remain outside these policy debates.

The pitch of these debates will rise as so-called third-wave technologies find their way into broad adoption. Increasing use of video surveillance and progress on facial recognition will surely both improve campus security and raise issues about privacy, free speech, and the limits of in loco parentis monitoring. One wonders how the free speech movement might have played out under the watchful eyes of modern surveillance. Smart buildings and embedded sensors will log the paths of students, faculty members, and staff on campus, leaving a record of their collegiate experiences. Adaptive learning tools are showing dramatic learning results at Georgia State University, the University of Central Florida, and elsewhere, but they depend on large datasets of student work and raise privacy concerns. And while adaptive courseware can unearth students’ behavior patterns and nudge students toward effective learning strategies, many educators worry that the increasing reliance on algorithms and automated responses will promote formulaic or even rote approaches to learning.

**Ivory Tower or Tower of Babel?**

In the end, the outcome of the debates about how, whether, and when any specific institution is to socialize emerging information technologies may be less consequential than the debates themselves. In many ways IT leaders have seen how the networks they have engineered and operated have become higher education’s public square. For many of today’s public speakers, mobile devices and networks have replaced makeshift podiums and megaphones. Tech-savvy opinion shapers can now project information (or disinformation) across campus or across neighborhoods, cities, states, and nations, tilting opinions (or voting patterns) or
inspiring and choreographing spontaneous mobs.

Technology tools have the capacity—as Bill Gates warned—to create filter bubbles. Technology such as social media “lets you go off with like-minded people, so you’re not mixing and sharing and understanding other points of view. . . . It’s super important. It’s turned out to be more of a problem than I, or many others, would have expected.”

Filter bubbles make it possible for technology users to become separated from information that disconfirms, and from people who disagree with, their viewpoints. Our technologies and the bubbles they enable risk isolating us culturally and ideologically. Isolation and the echo-chamber effect, in turn, can lead to tribalism. Intellectual isolation and tribalism—while sprinkled throughout the history of higher education—are antithetical to nearly every conception of the university and erode the capacity of those in higher education to uncover truths. When combined with uneven student information literacy and abundant fake information, intellectual isolation and tribalism splinter our institutional communities, stoking—rather than extinguishing—the fires of intolerance that seem to plague modern society.

It is a sign of the times that John Ellison, dean of the College at the University of Chicago, felt obliged to remind the entering class of 2016: “We expect members of our community to be engaged in rigorous debate, discussion, and even disagreement. At times this may challenge you and even cause discomfort.”

As higher education embeds artificial intelligence (AI) or installs intelligent speakers throughout its dormitory rooms or injects other technologies into student prospecting, loan counseling, crisis hotlines, and classrooms, commonplace objects and processes will take on increasingly “black box” aspects. In some respects, institutional processes—including teaching—will become like autonomous vehicles. The processes will get most people where they’re going, but few people will understand how they got there. Between now and then—and certainly when objects and processes fail—issues will surface, opinions (informed and otherwise) will proliferate, and tempers will flare. Emerging technologies raise grave issues, carry significant risks, and beg consequential choices. Recently, more than 1,400 Google employees signed an internal petition decrying the company’s secret efforts to censor a fact-limiting browser being readied for use in China. A similar protest prompted the company to cease defense-related contracts with the U.S. Department of Defense. AI “bug hunters” at DeepMind Technologies are chronicling myriad examples of algorithms that are doing what their builders said but not what they
wanted. Such algorithms take shortcuts that their creators had not thought to define as off-limits. As Tom Simonite put it in Wired: “Teach a learning algorithm to fish, and it might just drain the lake… If a neural network managing an electric grid were told to save energy … it could cause a blackout.”

How any specific institution will approach socializing these new and fraught technologies—amid possible pitchforks and torches carried by the academy’s righteous and fearful—may depend on the CIO. The CIO has always kept an eye on the possible: on the vision of how information technologies can enable or even transform core institutional activities. Even more, the CIO can create or support an institution’s capacity to see inside the black box. And most important, the future CIO must become the great communicator—not only of the capabilities and workings of new black boxes but also of the strengths and shortcomings of these technologies in the social and political context of the institution.

To succeed, this future CIO must

1. be deeply attuned to institutional history, mission, and culture;
2. employ a governance that informs and confers credibility on CIO actions that increasingly brush against the soul of the institution;
3. be a keen listener;
4. have the ability to communicate complex technical ideas and concepts in ways that lend compelling meaning to the institution’s social and political context;
5. connect what is technologically possible to the student experience, the institutional outcomes, and the vitality of the institutional community; and
6. ensure fidelity to higher education’s first principles—that truth seeking is mission-critical and that divided houses fall.

The CIO’s new clothes are not wholly new. Even as those of us who still cherish or even wear Hush Puppies make for the profession’s exits, we are being succeeded by professionals who are attuned to their institution’s heartbeat and who possess many of the skills outlined above. Likely, ethics is the CIO’s next sartorial frontier.

Fifty years ago, when Reed College CIO Marty Ringle taught a course on the ethics of technology, he “went to great lengths to emphasize that the thrill of inventing new technologies needed to be tempered by an understanding of how those technologies might alter society and impact individuals.” Today, Ringle warns: “The need to be mindful of the ethical implications of what we do—especially in education—is greater than ever.” Former CIO Susan Metros agrees: “As IT professionals, we need to provide services and invent tools that will help students sort through the moral and ethical issues of seeing while questioning whether to believe.”

So much more can be—and will be—written about how the technologies shaping the Age of Big Data are, in turn, shaping us. As we read about the unfolding of events such as Facebook’s privacy debacle, or the censoring of search by Google in China and elsewhere, or the Russian tampering with U.S. and other elections, or the rise of cybermobs or cyberbullies or filter bubbles, it is easy to become dispirited or downright dystopian in outlook. AI is highlighted here because, in part, it is such an easy target for those of us who have borne witness to a few of the unintended consequences of information technology over the years. As with automobiles, information technologies are becoming more powerful and more reliable. And as with automobiles, information technologies are becoming sealed systems. Their internals can be understood only by the certified high priests or priestesses of IT. It is also becoming less obvious who is in control of the human/technology interface at any given moment. Is your car driving, or are you? Is that a TA you are texting, or is it a teaching bot? It is likely that just as the “e” is dropping from e-commerce or e-learning, the word artifical will drop as we discuss intelligence. At some point, we are simply unlikely to know or understand the sources of our own knowledge.

The things we cannot see and do not understand often frighten us the most, especially when potent technologists—such as Bill Joy—warn us that accelerating technological change could cause something like the extinction of human beings within two generations. IT leaders must evolve. They need another wardrobe upgrade. They must become those priests and priestesses who can see what’s in the black box. They must understand how what they see inside the black box connects to not only the mission of their institutions but also their institutions’ cultures, leading characters, aspirations, and communities. They need to mind and respect their institutions’ ethical guard rails. And they need to become the great explainers whose credibility and standing can promote either caution or experimentation, when appropriate.

Maybe now is the time to ask professional organizations and philanthropic foundations to join forces to create a kind of Underwriter’s Laboratory for educational technology. Maybe there is more to techno-skepticism or techno-evangelism than shouting across filter bubbles. Maybe we should not fully entrust the education of young people to the marketing hype of well-intentioned edupreneurs and edu-punks. Maybe we can collectively organize the technical capacity to look “under the hood” of emerging technologies and verify (or not) that these technologies perform the functions represented by their creators in the marketing literature. With testing and certification as a foundation, maybe we can sharpen our current research agenda’s focus on the keys to effective socialization of technologies. The potent combination of testing, certifying, and guiding the socialization of emerging technologists will surely help both the eager early adopter and the die-hard skeptic. In any case, more information cast in clear terms could both enable the communicator and lower the possibility of the debate’s polarization. Situating such information in both ethical and cultural contexts is key. Paul LeBlanc, president of the University of Southern New Hampshire (SNHU), makes a compelling prediction: “We will
needed as many ethicists and sociologists at EDUCAUSE gatherings as IT staff and edtech vendors.”

With machine learning ahead of us, the pace of technological change is about to quicken. It is not likely than any of us will be able to keep up. If we lose the capacity to deeply influence the adoption and socialization of technologies at our higher education institutions, we risk becoming just another opinion echoing inside another filter bubble. The stakes are high. As Ringle said: “Let’s not screw it up.”

Notes
1. David S. Landes, The Unbound Prometheus: Technological Change and Industrial Development in Western Europe from 1750 to the Present, 1969.
11. John (Jay) Ellison, “Dear Class of 2020 Student” (letter to the University of Chicago undergraduate student body), n.d.
2018 EDUCAUSE Leadership Award

The 2018 EDUCAUSE Leadership Award recognizes Celeste M. Schwartz, Vice President of Information Technology at Montgomery County Community College (MCCC), for dedicating her wide-ranging leadership to the profession of higher education information technology, for enabling the efficient and effective use of technology in support of student success, and for serving as a role model to women and other aspiring technologists in the profession.

From the time she stepped onto the MCCC campus in 1968 to begin her own educational journey as a computer science student, Celeste has felt a deep connection with the place she would serve for decades to come. She is regarded as an exceptional leader whose commitment to and passion for service is both unmatched and contagious.

Celeste has a reputation as a visionary who has continuously advocated for quality improvements through the adoption of innovative technology solutions. Through its integration of several enterprise systems, MCCC was one of the first community colleges to offer a completely integrated one-stop-service experience for students, thus becoming a model for other community colleges across the United States.

Celeste provided strategic thinking and leadership on several MCCC initiatives that profoundly influenced and improved the teaching and learning experience at the college. In the mid-1990s she collaborated with faculty to define classroom standards that continue to evolve and ensure that learning spaces have modern and effective technology. A decade later, she worked with Apple on the Digital Campus Academy program to deliver widespread course content via the Apple platform. Celeste’s productive partnerships with technology providers and her participation in client advisory communities has allowed MCCC to contribute to the development and functionality of many commercial products and has provided valuable insight for vendors from a community college perspective.

High performance and exceptional dedication to the students and her community are the hallmarks of Celeste’s career and the attributes she cultivates in those who work on her team. Over one-third of the IT team members on her staff are MCCC graduates, many of whom began as interns in Celeste’s department. As a result of Celeste’s organizational skills and leadership, the MCCC IT team has a first-rate reputation and has been recognized by the Center for Digital Education as a top digital community college eleven times, ranking three times as first in the nation. Celeste’s personal approach to coaching others has extended well beyond the campus, as she generously mentors other aspiring technology leaders through her connections in EDUCAUSE and other professional networks.

Celeste has been active in the EDUCAUSE community since 1997 (and CAUSE prior to that). She was a member of the ELI Advisory Board and several event program committees (serving as chair of the Mid-Atlantic Regional Conference Program Committee in 2008) and was a mentor for the Hawkins Leadership Roundtable, among many other volunteer assignments. In twenty years of activity with EDUCAUSE, she has presented as a subject-matter expert on a variety of topics, including analytics and the use of technology to support student success, IT governance, and community colleges. Beyond EDUCAUSE, she has co-chaired the IT Affinity Group, a leadership and technical resource for the CIOs of the Pennsylvania community colleges. She is active in KINBER, the Keystone Initiative for Network Based Education and Research. And she is MCCC’s liaison to Achieving the Dream, an EDUCAUSE partner in advancing the success of community college students.

Celeste M. Schwartz has dedicated her life’s work to the advancement of innovative technology solutions that provide a bridge to student success. She is a tireless worker, empowering leader, and valued resource to all with whom she works, both locally and across the nation, and it is fitting to recognize her significant contributions to the profession with the EDUCAUSE Leadership Award.
EDUCAUSE Review: How did you get your start in the higher education IT profession?

Schwartz: I got my start in higher education upon graduation from my local community college with a job offer to be a keypunch operator. My goal was to obtain a four-year degree in business administration, and the community
college position offered a benefit to cover costs of subsequent college-level courses. I worked full-time as a key-punch operator during the day and attended St. Joseph's University during the evenings for the next two years. In the early years, it was my intent to leave higher education for a corporate job. However, with each corporate offer, coincidentally, came greater opportunity and promotions within Montgomery County Community College. Seven years into my career at MCCC, I was offered the opportunity to lead the IT department, and from that moment forward, I fell in love with the mission of the community college.

EDUCAUSE Review: Did someone inspire you to leadership?

Schwartz: Two mentors stand out in my early years. The first was a data-processing faculty member who supported me throughout my associate degree and in acquiring my first job in the field. The second and most significant career mentor, the dean of administration at MCC, came early in my career and provided me the opportunity to lead the IT department at a very early age. This was also at a time when other college leaders believed that IT departments should be led by men. The dean mentored me over the next three years of his time at MCCC and throughout his retirement. It was through his encouragement that I learned that there was more to the job than providing a great infrastructure and reliable administrative and academic systems. He ensured that I understood the expectations of the leadership team and helped to prepare me to sit at the leadership table. His passion for the community college mission was evident. He demonstrated the importance of the open-access, community mission and the long-term importance of providing higher education opportunities throughout our country.

EDUCAUSE Review: When you think about your career, what lessons learned would you pass along to those starting out in this field?

Schwartz: Looking back at my career, I realize that a significant milestone occurred three years after I took on the leadership role in the IT department. With the appointment of a new president at MCCC and my completion of a master's degree in computer science, I was appointed as one of a six-member leadership team reporting to the new president. Since then, while the presidential leadership has changed over the years, I have been fortunate to remain a part of the president's leadership team for over three decades. Reporting at this level of the organization gave me an early opportunity to learn the inner workings of a community college.

For those starting out in the field, I am sharing what has worked for me throughout my career: be truthful, have high ethical standards, understand and support your institution's mission, keep learning, demonstrate value to your institution, leave your ego at the door, run your IT organization with a service mindset, solicit ongoing feedback and build your IT organization's improvements based on that feedback, listen closely to what is and is not being said, be a good observer looking for opportunities to add value to the institution, and most importantly, place your focus where it matters most, on doing what is best for your students.

EDUCAUSE Review: What have been your greatest accomplishments?

Schwartz: I have a few accomplishments over the years of which I am very proud. First is assembling an amazing team of IT professionals who all put students at the center of their work. More recently, I am most proud of my work around the involvement of information technology in student success. About six years ago, I had the opportunity to co-write a Bill & Melinda Gates Foundation grant that supported the design and implementation of integrated planning and advising systems. The VP for Student Affairs had just completed a redesign of the advising process, and we were able to overlay technology systems onto the new advising process flow in a way that enhanced the college's delivery of support for student success. Some said we were lucky to have received the grant, but I believe it had more to do with that fact that the design was a collaborative process among faculty, advisors, and administrators. The grant set the stage for a new era of providing student success services while also fostering a culture shift within the college. The IT team supported the implementation of the new systems, and our collective IPAS (Integrated Planning and Advising Services) team was successful in receiving round two funding to continue this work. While the grant has
infrastructure, administration systems, academic systems, IT support, library staff, institutional research staff, and academic faculty. Over the past several years, however, we have seen an increase in the number of smaller colleges, international institutions, and community colleges participating. We have also seen a significant shift in the annual EDUCAUSE Top 10 IT Issues lists, with higher rankings assigned to student success initiatives, thereby increasing the number of student affairs staff attending EDUCAUSE meetings. EDUCAUSE is attracting more cross-functional teams, aligning with the changes we are seeing across higher education. As the IT department starts to become a more collaborative, supportive arm of the institution and align with other departments to deliver institutional strategic priorities, the numbers of those attending EDUCAUSE from those other departments will increase. I have also seen much greater participation in and expansion of the EDUCAUSE online communities, a significant increase in information and research made available via EDUCAUSE, and more emphasis on data and data sharing. EDUCAUSE is not just an organization that supports technologists but, rather, is an organization that is important in the advancement of higher education institutions as a whole.

EDUCAUSE Review: How can we prepare ourselves for the higher education IT challenges ahead? What do you see coming in the next five years?

Schwartz: To be successful with future IT challenges, we need to remain flexible, understand that the pace of change will continue to accelerate, and realize that the expectations of end-users will continue to expand as technologies remain embedded in our everyday lives. I expect that we will always be challenged with budget and staffing constraints, information security and privacy, and talent shortages in data science and information security. Over the next five years, I anticipate greater adoption/integration of artificial intelligence, smart buildings, virtual reality, and cloud services. I also expect to see a razor-sharp focus on the user experience and on increased options for self-service.

EDUCAUSE Review: What is one characteristic that you believe every leader should possess?

Schwartz: Former U.S. President Dwight D. Eisenhower stated, “The supreme quality of leadership is unquestionable integrity.” Selecting a single characteristic is not easy, since I believe that great leaders require several characteristics. But I would say that honesty and integrity top the list. Leading a higher education IT organization is an interesting, challenging, and fulfilling career. I remain passionate about my work, knowing that I have had the opportunity to make a difference that has positively impacted students’ lives.
2018 EDUCAUSE Leadership Award

The 2018 EDUCAUSE Community Leadership Award is presented to James Phelps, Director of Enterprise Architecture and Strategy at the University of Washington, for his unique and remarkable contributions to information technology and the higher education community, including his prescient understanding of the importance that enterprise architecture will have in both commercial and academic enterprises.

Jim's strong sense of giving back to the community and contributing to the common good was present in his early career choice to work on medical products to assist in the treatment of brain tumors. Building on his passion to employ technology in the service of others, Jim returned to higher education and, over the past twenty-four years, has served in a variety of roles and across multiple institutions and organizations. Each step of his journey has brought increased responsibility and expanded leadership.

During his work at the Biological Computing Consortium at Oregon State University, Jim promoted a holistic vision of information technology, working collaboratively with staff and researchers to develop a suite of services in support of his vision, guiding the organization to new funding and staffing models, and developing pathways to larger opportunities and success. When Jim's career led him to a position as an enterprise architect at the University of Wisconsin–Madison, he worked with key university leaders to promote a deeper understanding of the strategic role that information technology could play in the university's mission and established a series of IT solutions that fundamentally changed the ways the university conducted its business. He also worked to build deep collaborative partnerships between the administrative units and the IT organization to improve the student experience.

While at UW–Madison, Jim worked with Internet2 to help spread knowledge and teach best practices surrounding the emerging issue of identity and access management. These efforts led him to work with the leadership of Internet2 and EDUCAUSE to found Itana (so named for its focus on IT Architecture iN Academia). Jim's vision for the organization has guided Itana through an expansion in both its focus and its membership—from a small group at its inception to a current group of over 700 active constituents. And Jim's masterful facilitation of the group has created in Itana a program that engages its participants in face-to-face gatherings and every-other-week call-in programs.

In his current role as Director of Enterprise Architecture and Strategy at the University of Washington, Jim is building on his deep understanding of enterprise architecture and the field's changing and exceedingly more critical role in today's business transformation. Having served as a coach and mentor to many other enterprise architects over the span of his career, he recognizes the need for diversity in both technology and architecture services and is promoting outreach efforts. These include the EDUCAUSE Women in IT Constituent Group, with the hopes of increasing the number of women in architectural leadership roles.

Jim has been a strong advocate of EDUCAUSE through his writings and his participation at conferences and in constituent groups. Beyond EDUCAUSE, he has contributed across the professional landscape through his involvement with Internet2, Itana, the Committee for Institutional Collaboration (now called the Big 10 Academic Alliance), the Common Solutions Group, and countless other higher education collaborations. He uses his hard-won experiences to mentor others individually, to support leaders of other EDUCAUSE Constituency Groups, and to advance emerging initiatives such as the work Internet2 is doing in the Internet of Things.

Today, higher education is far better prepared to realize the opportunities afforded by information technology due to Jim's extraordinary leadership. He has focused on contributing to the greater good of the people and organizations around him, making James Phelps a community leader in the truest sense and worthy of the EDUCAUSE Community Leadership Award.
EDUCAUSE Review: Why did you decide to build Itana? What motivated you to take on that work?

Phelps: I saw the complexity of the problems that higher education faced—the growing complexity of the technical landscape and the rapid changes due to
the internet and World Wide Web—and I thought: “The future of higher ed needs to be architected.” I knew that we needed to design modern solutions and that doing so wouldn’t be easy. I also knew that there were not enough IT architects in higher education. So I reached out to people I knew in Internet2, EDUCAUSE, and the Common Solutions Group (CSG) to find a small core group to start this work and to establish a support structure for the effort.

EDUCAUSE Review: How can we build communities to solve our common IT problems?

Phelps: About the time that I worked to found Itana in March 2007, I read “The Cathedral and the Bazaar,” by Eric S. Raymond. I was taken by the idea that one person’s intractable problem may have already been solved by another person. The open-source concept was gaining notice. Higher education has always had a culture of collaboration and community. What I thought, back then, was that we could share the heavy lifting. The higher education community is unique in that we are not in competition in the same way that businesses are. We don’t protect our every advance or every idea as intellectual property. Give a compelling problem to a wide group of people, and some will engage to do the heavy lifting. They will be inspired by the mission.

EDUCAUSE Review: What goals should IT professionals across higher education pursue collectively, as a community?

Phelps: I think it is absolutely critical that we get our executive leadership (chancellors, presidents, provosts, CFOs, etc.) to truly understand that higher education is an IT business and that information technology is the driver of the transformation that every institution needs to go through to remain relevant. We need to find those institutions whose leaders are already converts, share the stories of how they came to see the vision, and get them to speak to their peers.

We are also in the midst of a digital transformation driven by many shifts in technology itself. Communities need to share wins and lessons learned around machine learning and artificial intelligence, the internet of things, and all the rest of the digital transformation technologies. We have difficult paths to navigate, and we must convince vendors that our requirements are also important. We should not do this heavy lifting alone but, rather, together as a community.

Finally, we need to develop the next set of leaders. We need to increase the diversity of enterprise, business, and technical architects. Communities are places where individuals can find coaches and mentors. We need to create communities to build the future leaders of higher education.

EDUCAUSE Review: How can IT professionals make the community sustainable and scalable?

Phelps: Being the solo champion is fine in the beginning. I led Itana for the first three or four years as the community grew. I found I had a few individuals who would always step up. As Itana grew, I decided it was time to build a steering committee to spread the work. The members of my steering committee are absolutely critical to the success of Itana. Itana would never have been as successful without them. They are a force multiplier. They bring great ideas to the table, as well as new networks and extra hands to solve problems. They share the heavy lifting.

EDUCAUSE Review: Do you have suggestions for gaining institutional support for community work?

Phelps: One thing I do is take ideas that I learned in the community (from Itana, EDUCAUSE, and CSG) back to my institution and tell my colleagues, for example: “This is a great idea that came from Michigan. I learned about it on the last Itana call.” This helps my leadership see the value of my being involved. I also look for colleagues I think would gain from engagement with the community and bring them along to meetings, using this opportunity as a foundation for coaching and career planning. I think this has made leaders at my institutions happy to have me involved. What I gain gets spread widely.

EDUCAUSE Review: Are there specific projects you are particularly proud of?

Phelps: Last year, we asked Beth Schaefer to step into the role of Outreach Officer for the Itana Steering Committee. I loved the calls we had with EDUCAUSE constituent groups like Women in IT, Diversity in IT, and IT Service Management. I’m really proud that the committee took to heart the idea of building bridges to other groups and that this has become a core value of Itana.

EDUCAUSE Review: What is your secret for successfully balancing institutional leadership with service to the community?

Phelps: I don’t think they are that separate. I lead in the community to get feedback on things we are working on in the institution and to bring great ideas from our partners back to the institution. I use the community to coach and...
mentor young professionals in the IT organization. I look to help those who are interested and engaged. Community leadership and involvement doesn't take that much time, and I think the value far outweighs the cost.

For example, I was on the EDUCAUSE Digital Transformation Task Force. I learned so much, and this work helped ground my thinking. When I returned to my institution, I put together a talk for our senior leadership team. What I shared helped set the stage for a day-long strategic planning effort.

**EDUCAUSE Review:** What do you find most rewarding when it comes to community leadership?

**Phelps:** Watching people rise to new leadership roles and activities. When the person who has been a lurker on conference calls for months suddenly says, “I’ll help with that” and then steps up and shines, eventually taking on leadership roles for the next working group. You can see the potential and just wait for it to be realized.

I’m also incredibly proud of the work that Itana members are doing, for example, on the internet of things, the Enterprise Architecture Maturity Model, and the long-running API Management Working Group. All of that has little to do with me. I enjoy watching the community come together, form into working groups, and then do good work.

Finally, I love hearing about the breadth of work and experience of community members. With so many great efforts going on across higher education, it is marvelous to get to sample some of them.

**EDUCAUSE Review:** Do you have advice for the next generation of community leaders?

**Phelps:** Is there anything that you wish you had known before?

**Phelps:** There is a lot I wish I had known. First off is how much you learn by leading a community. People are afraid, I guess, to present to the community. They feel like they have to be “done” or have a perfect answer. I get such great feedback on my half-baked ideas.

Also, leading a virtual community helped me lead face-to-face meetings back at work. Nothing is as hard as getting a group on the phone to engage. Once you get the hang of that, you can get a room of people engaged pretty easily.

My advice? Just step up and lead. You will learn to lead, you will learn about your area of practice, you will learn about people. And you will find compatriots who are dealing with the same problems that you are trying to solve. Someone may even have already found the solution.
The EDUCAUSE Rising Star Award for 2018 is presented to Damian Doyle, Assistant Vice President of Enterprise Infrastructure Services at the University of Maryland, Baltimore County (UMBC), to recognize his steady progression of achievement within UMBC and his expanding influence in the profession as a role model for collaborative partnerships to achieve success.

Damian's connection with UMBC began when he was a student and scholar in the university's Honors College. He was a student employee in the Division of Information Technology (DoIT) and joined the department full-time upon his graduation. Over time, he distinguished himself by taking on some of the university's most foundational and difficult technical assignments, beginning with supporting the NSF grant to implement the vBNS (very high speed Backbone Network Service, which later formed part of the backbone of Internet2) and continuing with his leadership on numerous other projects to establish or upgrade the technology to support the educational process and maintain network security on campus.

In recent years, Damian was promoted to director, senior director, and recently Assistant Vice President of Enterprise Infrastructure Services (EIS) and also assumed responsibility for support for the university's high-performance computing facility. In this role, he has led campus efforts to move to cloud services and has spearheaded efforts to prepare technical staff in their support of this move. More recently, Damian closely collaborated with staff involved in business services, enrollment management, and institutional research to help manage upgrades to Amazon Web Services involving the university's financial and analytical platforms.

On a campus with a strong tradition of staff participation in community-shared governance, Damian stands out as an especially insightful and effective leader. Serving as the first UMBC Professional Staff Senate president to come from DoIT, Damian has exhibited an inclusive and positive leadership style that has inspired trust and collaboration as the staff and campus community face complex challenges. He has made key contributions on several high-level committees and groups on campus, always demonstrating an outlook that is thoughtful, substantive, and collegial.

Damian's commitment to UMBC's ethos of "inclusive excellence" resonates through his work to expand opportunities for under-represented groups in all disciplines. Damian serves on the internal board of UMBC's Center for Women in Technology (CWIT) and has collaborated with CWIT to develop internship programs for women and minority student employees with DoIT. As part of this same effort, CWIT students gain valuable hands-on experience working in the university's cybersecurity, Unix infrastructure, and advanced networking teams—all to help prepare them for their future careers. Damian also volunteers extensively with Maryland's First Lego League, serving as the chair of the state planning committee and one of the head referees at competitions throughout the state.

Damian has participated in the EDUCAUSE Management, Leadership, and Leading Change Institutes, as well as contributing to the Cloud Computing Constituency Group and the ECAR Cloud Working Group. He has also presented in or moderated several sessions at EDUCAUSE conferences and has served as a reviewer for both the Connect and the Annual Conference Program Committees. He will be among the first faculty cohort in next year's EDUCAUSE Institute program for senior directors.

Damian's demonstrated technical and managerial aptitudes in an academic computing setting, as well as his commitment to the promotion of diversity and inclusion and his consummate focus on building relationships as a bridge to working collaboratively to leverage technology, make Damien Doyle worthy of recognition as an EDUCAUSE Rising Star—and as a leader who has much more to contribute to the higher education IT community.
EDUCAUSE Review: Who inspired you when you started in your career, and who inspires you now?

Doyle: Early in my career, my love of technology is what inspired me. Whether it was consumer electronics, innovations in networking, or computing, I always loved how technology could
transform and connect things. I credit my parents, and especially my father, for that love. He worked with computers as a hobby and in his job, and he involved me from an early age in understanding how they worked. He inspired me to want to know more and to appreciate things for how they were made and designed, not just for how they functioned. My mother's leadership and guidance have also been a constant inspiration to me throughout my life; from her I got my love for education.

What inspires me now are the unbelievable people I get to work with and learn from every day. The people within higher education and their stories, passions, and dreams have a huge impact every day on my thinking and motivation. I'm continually impressed by the challenges many students have overcome to get where they are, and by the faculty, staff, and colleagues who are changing lives through their work, their research, and their commitment to education. The more people I talk with, learn from, and connect with, the more inspired I am to help them succeed and achieve their goals. The best part is there are always new stories, and new people, to be inspired by.

Another source of inspiration these days is my son, Leo, who has helped me grow in ways I'd never have imagined—from helping me tackle my fears, to seeing things in a different perspective, and to always striving to be better. That being said, I still geek out over new technology, of all kinds. It's just that now I have to work even harder to keep up with Leo and his love of technology as well as my own.

**EDUCAUSE Review:** What advice would you give to those who are just getting started as IT professionals in higher education and to other “rising” leaders?

Doyle: One of my biggest regrets is that while I have spent so much of my life in higher education, until recent years I didn’t take advantage of many of the things that make it such an amazing environment in which to work. In higher education, we are constantly immersed in some of the most forward-thinking, innovative, and diverse environments in the world. Regardless of what your job is, it’s incredibly important to step outside of your role and be involved in what is going on throughout the institution—whether that means attending events on campus, helping a student organization, actively participating on a campus committee, or collaborating with other professionals throughout the community. I’ve been teaching classes recently, and that has connected me with students and other faculty in an entirely new and extremely rewarding way.

These connections can help rejuvenate you and keep you motivated and focused not only on your job but also on what makes higher education so amazing. It is often too easy to say we are busy and just keep our heads down, working hard. In the end, being part of the larger community and taking advantage of our unique opportunities will help us understand who we are serving.

In short? Stay connected and involved, and take the time to appreciate what a truly unique, remarkable environment we are privileged to work in.

**EDUCAUSE Review:** Do you have suggestions on how best to stay current as a higher education IT professional?

Doyle: It sounds simple, but love what you do. If you are doing something you love, it is much easier to stay current because it is a passion and not really “work.” Find an area within our field that you find inspiring and fascinating. Also, realize you cannot be an expert in all facets of information technology. Try to have a well-rounded understanding of higher education information technology and of higher education in general. Take advantage of all the information available from organizations related to your area of interest. Publications like the Chronicle of Higher Education and associations like EDUCAUSE itself are amazing repositories of information. I wish I had known, earlier in my career, about the information and knowledge they provide. Lastly, surround yourself with really smart and driven people, listen to them, and always be willing to learn.

**EDUCAUSE Review:** What can others in our community do to support young IT professionals?

Doyle: For me—and I think this is true for most other young IT professionals—there is a drive to innovate, the do new things, to solve interesting problems. To that end, leaders can be very deliberate about making sure that people have ways to grow and be challenged, ways that resonate with them as well as benefit the institution. I feel it is incredibly important that we find more ways to connect people early in their careers to the mission of higher education and to the community that exists outside of their daily jobs.

The IT organization can be very siloed, and many of the early career roles lend themselves to back-office work away from students, faculty, and much of the campus community. Managers and leaders need to be intentional about freeing up time to help jumpstart opportunities for development in younger staff. Too often these opportunities are reserved for staff later in their careers, and we are missing a great chance for new ideas if we wait. If we can help broaden younger professionals’ access to new ideas and different ways of thinking earlier in their careers, we would all benefit from a great infusion of innovative ideas that would help drive change.

**EDUCAUSE Review:** What are you doing to ensure that you continue to grow and develop as a leader?
Doyle: Two things immediately come to mind. I try to (1) never stop learning, and (2) make a point of taking risks and putting myself in situations that make me uncomfortable. Part of learning goes well beyond reading and staying up-to-date on technology; you have to be willing to listen and to take the time to connect with people. Relationships and trust are the foundations that good leadership is based on, and you will learn more from connecting with people from all parts of higher education than you can through any other method. Find colleagues and friends, both internally and externally, who will not only support you but also challenge you to be better and think differently.

In terms of taking risks, I shied away from this early in my career, and I wish I had been braver. I finally decided that if something made me uncomfortable (e.g., public speaking or volunteering), or if every part of me was saying “Oh geez, I don’t want to try that,” I would immediately raise my hand and take the risk. This has led to so many amazing opportunities and rewarding experiences that I couldn’t list them all even if I tried. Taking risks was not, and is not, easy. It is scary and unnerving, and I often immediately think, “What did I just do?” That being said, taking these risks has changed how I think and act in almost every aspect of my life and my career. It has also affected how I work with my son as he is growing into a wonderfully kind, caring, and thoughtful young man. I work with him to be braver and more confident than I was at his age, to realize he has valuable ideas to contribute, and to act with confidence—never hubris, but with humble conviction. I feel every leader and every person should strive to do the same.

EDUCAUSE Review: What is most important for a leader to keep in mind in order to be successful?

Doyle: For me, it is remembering that everything is about relationships, not technology. That is one of the most important lessons I’ve learned over the years. Technology is an amazing, innovative, constantly evolving set of tools, but still just tools. Before you can use technology to solve a problem, you have to take the time to understand the people involved and their core issue. Doing so takes time, patience, and empathy, but it’s worth the effort. If you spend time connecting with people across the institution and listening to their frustrations, drives, and passions, you can learn to collaborate in ways that will resonate with them. In addition, by showing that you understand their concerns, and why they do what they do, you build trust. That trust will often evolve into a partnership. That can lead to an increased willingness to work together, to take risks, and to help drive change. Building that trust can be one of the most challenging but most rewarding parts of the job.