Work and the Purpose of College

Plus:

25 years as Bay Path’s president
Educators and coaches team up
“When the purpose of college is providing a liberal education for its learners, those learners have many opportunities to prepare not only for the world of work but for lifelong learning in a global setting.” — Terrel L. Rhodes
From 1818 R Street NW

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The Purpose of Higher Education and Its Future

In his compelling *Forbes* essay, “A Nobel Laureate’s Mind-Blowing Perspective on the Ultimate Outcome of an Education,” Brandon Busteed, president of Kaplan University Partners and former executive director of education and workforce development at Gallup, discusses the lasting impact on him of one Nobel laureate’s response to an interview question on the ultimate outcome of an education. Perhaps it was the absolute certitude, along with the distinctiveness, of Daniel Kahneman’s reply—“Well, I think that’s quite obvious. It’s to change what you believe”—that caught Busteed off guard in 2012. Yet, it is the enduring relevance of Kahneman’s insights into the power of education that has Busteed still thinking about the assertion seven years later. What makes a liberal education, in particular, transformative is that it engenders the capacity to imagine that one’s most fundamentally held beliefs might actually be mistaken. Such an education is critical for students to prepare for global citizenship, develop a sense of well-being, and foster personal and social responsibility.

Nevertheless, traditional claims around college as an essential component of the American dream are being challenged as the value of a college degree is being reduced to employability, and social mobility is significantly declining despite a substantial increase in the number of college graduates. A poll released by Gallup in December 2019 is both reflective of these trends and cause for concern. The latest in a series of national reports indicating a rapid decline in public confidence in higher education over the past six years, the findings showed that only 51 percent of US adults now consider a college education to be very important, down from 70 percent in 2013. However, the most jarring statistic was that younger adults between the ages of 18 and 29 were more likely than those from other age groups to question the value of a college degree. This is especially troubling for those of us who believe that higher education is critical to addressing our nation’s persistent social and economic inequities.
Leaders in higher education must be prepared for the fact that a majority of young adults now consider getting a job to be the primary purpose of earning a college degree. Moreover, in the future, educational credentialing will likely no longer be the exclusive purview of colleges and universities. Instead, business and industry will deliver curricula in the workplace, either in partnership with or independent from institutions of higher education. Thus, more than ever, leaders in the academy must demonstrate the ways in which we are preparing students for lifelong learning in the context of the workforce, not apart from it. All students must be engaged in high-impact practices that provide them with opportunities to apply their knowledge and skills in real-world settings from their first to final semesters. Finally, educators must adopt an equity-minded approach by being intentional about connecting curricula to careers, paying attention to reducing the costs for students, and positioning graduates for success in work, citizenship, and life by promoting student agency.

Understanding the intricacies of the higher education landscape of the future, the authors in this issue elucidate the transformative power of liberal education while addressing the economic realities of higher education’s unsustainable financial model. In the process, they reinforce Kahneman’s notion that the fundamental purpose of higher education is “to change what you believe.”—LYNN PASQUERELLA

NOTE
Work and the Purpose of College

In 1949, at the age of fifteen, my grandmother sailed to the United States. She and my great-grandmother had fled Ukraine during World War II, ending up in a refugee camp in Germany before finally arriving in Syracuse, New York, where my great-grandmother found work as a maid in a doctor’s home. While my grandmother could speak Ukrainian, German, Polish, and some French, she couldn’t speak English. The teachers in Syracuse put her in kindergarten to start with the ABCs. The class laughed. “I thought, go ahead, laugh—I want to learn,” she reflects decades later. After school, she practiced English by listening to baseball games on the radio. She rooted for a player she thought was Ukrainian, later realizing that, with her then-limited English, she’d misheard—he was Puerto Rican. In the next year and a half, she finished the eighth grade, having mastered English well enough to graduate second in her class. “Imagine that,” she says, “a foreigner being second-highest.”

She married before she was seventeen, taking night classes to earn her GED, then secretarial courses at a vocational high school. “But the subjects weren’t my passion,” she says. Her teacher encouraged her to attend college, but how, she asked, was she going to do that when, at eighteen, she already had a daughter to care for? She found a job at a tire company, later at a department store, and then at a bakery, doing financial calculations with a comptometer.

As I edited this issue—which explores how a liberal education can help prepare students for meaningful careers—I thought about how my grandmother, had she gone to college, might have expanded on her language abilities to find a fulfilling profession.

Nearly every article in this issue touches on the importance of global awareness and intercultural knowledge to ready students for, as Margee Ensign writes, embarking on careers and solving complex world problems such as climate change, the refugee crises, and the automation of jobs and other such consequences of ever-enhancing technology. Indeed, part of higher education’s mission, writes Terrel Rhodes, is “to prepare our graduates for lifelong learning and global citizenship.” Liberal education beyond the United States is also crucial, and Kyle David Anderson and Kyaw Moe Tun describe how Parami University has brought liberal education to Myanmar, promoting understanding of democracy and social justice in a country still transitioning from a military dictatorship to a functioning democracy.

Two articles offer models for career-focused language and internationalization programs—one at the University of Rhode Island, the other at Normandale Community College, which created one of the first Somali area studies programs at a community college. Understanding other cultures also makes good business sense, notes Chris Allison, relating how his liberal arts education prepared him to lead a tech company.

In reflecting on her twenty-five-year presidency at Bay Path University, Carol Leary highlights her institution’s One Day a Week Saturday Program, which offers nontraditional adult women students—like my grandmother might have been—the chance to earn their degree in as little as a year. Higher education, Leary writes, must “adopt new learning models that will meet our students where they are in their lives while addressing affordability.”—CHRISTEN ARAGONI
Inspired STEM

In November 2019, nine hundred educators convened in Chicago for the AAC&U Conference on Transforming STEM Higher Education. Participants celebrated the thirtieth anniversary of Project Kaleidoscope—AAC&U’s center of STEM higher education reform—through workshops, sessions, and keynotes that charted a daring path forward for undergraduate STEM education and explored contemporary approaches to teaching, broadening participation, and using assessment tools to determine effectiveness. Mary E. Boyce opened the conference with a keynote that urged educators to move beyond efforts to enact incremental change by creating conditions for transformational change at their institutions. Saundra Yancy McGuire began the conference’s second day by exploring how metacognitive strategies can help students turn educational stumbling blocks into stairs. To close out the conference, David Hall became the first speaker from a historically black college or university to deliver a keynote at AAC&U’s STEM conference. His address bridged the gap that often exists between analytical sciences and spiritual insights, showing the conference participants that STEM has soul.

A Major Responsibility

Using the college department as the unit for change and for continuing to educate responsible, public-minded citizens in workplaces and communities, AAC&U’s initiative “Civic Prompts: Civic Learning in the Major by Design” provided opportunities for faculty members across colleges and universities in the form of a series of one-day institutes for departmental teams during the 2019–20 academic year (www.aacu.org/civic-prompts). Funded by The Endeavor Foundation and directed by Caryn McTighe Musil, AAC&U senior director of civic learning and democracy initiatives, the institutes provided dedicated space for departmental teams to expand students’ opportunities to deepen their civic knowledge, skills, and values through their major in order to inform their sense of agency and responsibility to the larger world. The institutes were held in Chicago in November 2019, Los Angeles in January 2020, and DC in March 2020. Faculty teams received support as they redesigned departmental requirements to scaffold experiences, courses, assignments, projects, research, and community-based engagements that reinforce for faculty and students alike a larger sense of purpose to create inclusive, compassionate, and just democratic societies that promote the welfare of people and the planet.

During AAC&U’s October 2019 Conference on Global Citizenship for Campus, Community, and Careers in San Antonio, a group of attendees visited the offices of the Refugee and Immigrant Center for Education and Legal Services (RAICES). The event was cohosted by RAICES and Trinity University’s Center for International Engagement and Center for Experiential Learning and Career Success, which collaborates with RAICES on student internships. RAICES staff talked about the various ways interns assist lawyers, social workers, and activists on work ranging from providing asylum seekers with information about their rights to offering legal aid to unaccompanied children.

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TERREL L. RHODES

The Changing Nature of Work and Careers

Higher education as a hub for establishing a lifelong learning system

With the rising costs of participating in higher education; uncertain economies buffeted by technological, structural, and political forces; and shifting perceptions of the usefulness of credentials once obtained, the purpose of college has become a popular topic for everything from sound bites and screeds to serious studies. In our contemporary global society, technology keeps information in our awareness and at our fingertips nonstop—allowing millions of people, regardless of their individual roles, to hear about higher education and the issues it faces, including debates about its costs and its value. These factors will continue to challenge educators and their organizations in two important ways: we will need to maintain constant attention to our missions, and, at the same time, we will have to engage in proactive messaging while exercising restraint in reacting to the news cycle.

The essence of the educational process in preparing future generations of humanity—beginning in preschool and continuing into postsecondary educational pathways—is nothing less than the sustainability of civil society and life itself. Liberal education, in particular, empowers individuals and prepares them to embrace the complexity, diversity, and change that are a part of existence. It serves to provide students with broad knowledge of the wider world (in areas of science, culture, and society), as well as in-depth study in a specific area of interest. Liberal education also helps students develop a sense of personal and social responsibility and well-being and allows them to acquire transferable intellectual and practical skills, such as communication, critical thinking, and problem solving, and a demonstrated ability to apply knowledge in diverse settings.

TERREL L. RHODES is vice president for quality, curriculum, and assessment and executive director of Valid Assessment of Learning in Undergraduate Education (VALUE) at the Association for American Colleges and Universities.
3 out of 4 employers would recommend a liberal education to their own child or a young person they know.2
Even though postsecondary education is steeped in tradition and described as slow to change, it has always been changing and will continue to do so. But higher education’s mission is not to chase or catch the newest media or social fad; rather, it is to prepare our graduates for lifelong learning and global citizenship.

The ongoing changes affecting higher education’s mission to educate for student success include several fundamental aspects:

- transitioning from a system of credits tied to seat time to one of demonstrating competency and proficiency;
- moving from an emphasis on majors and general education to a focus on the learner’s entire educational pathway;
- shifting from traditional letter grades to the application of learning demonstrated in students’ work over time;
- forgoing learning approaches based on knowledge transmission in favor of approaches focused on meaning- and sense-making;
- instead of providing access to engaged learning for the favored few, ensuring high-impact practices (HIPs) are available to all students, everywhere.

The purpose of college has always been the pursuit of truth and understanding and the transference of knowledge, skills, and abilities. The changes above can be viewed as ways in which colleges are moving away from the reductionist dimensions of higher education that arose in the twentieth century to handle expanded access to college to an emphasis on acquiring more of the higher-order skills and abilities necessary for students’ health and well-being in life and work in the twenty-first century.

The changes also encompass an additional purpose of college—the certification of learning. Through this rearticulation of purpose, it is possible to lift up elements of liberal education that prepare students to demonstrate learning proficiency in more complex ways over time.

**What we know**

Studies continue to emerge that bolster calls to rearticulate the purpose of college as laid out above while countering various canards about the lack of worth of specific disciplines, limited return on investment, and the disconnect between how college prepares learners for workplaces and what workplaces need. A National Academies 2018 report, *Branches from the Same Tree*, presents, for example, evidence that the integration of humanities and arts with science, technology, math, and medicine leads to improved educational and career outcomes for college students.2 A 2019 Burning Glass Technologies report, *The Hybrid Economy: How New Skills Are Rewriting the DNA of the Job Market*, makes the case that the changing nature of work requires technology employees to be educated in the essential liberal education outcomes associated with humanities and related fields.3

In addition, for more than ten years, the Association of American Colleges and

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78% of business executives say it’s very important that their workers possess critical thinking skills.4

34% of executives say that recent college graduates are well prepared in this area.5
Universities (AAC&U) has been surveying employers across the country regarding the skills and abilities they look for as they hire college graduates. In AAC&U’s most recent report, *Fulfilling the American Dream*, employers across different industries overwhelmingly reiterated what they have been asserting for the past decade: They seek much more than a learner with a specific major. They need college graduates with essential liberal education skills—creativity, oral communication abilities, critical and analytical thinking, ethical judgment and decision making, and the capacity to translate learning from one situation to another—to show initiative while working effectively both in diverse teams and independently.⁷

While employers also indicate that most college graduates have the qualifications for entry-level positions, they are less sanguine about graduates’ abilities to adapt to the changing needs of a particular job.⁷ This concern will soon intensify when, as a recent World Economic Forum study predicts, employers find themselves with an outsize increase in demand, relative to the current workforce, for the human skills developed during a liberal education.⁸ As another recent study states, “Companies need workers that can demonstrate these skills in addition to the digital skills necessary to work alongside automation.”¹⁰

**Witnessing the Learning**

High-impact practices (HIPs) offer multiple ways for students to develop the skills and abilities today’s employers are seeking. Examples of HIPs include first-year seminars, common intellectual experiences, learning communities, writing-intensive courses, collaborative projects, undergraduate research, diversity and global learning, ePortfolios, service and community-based learning, internships, and capstone courses or projects. Research has identified a series of criteria associated with enhanced student learning and achievement across all practices identified as HIPs:

- Students must devote considerable time and effort to purposeful tasks that deepen student investment in the activity and connection to their academic program and college.
- Students are put in situations where they must interact with faculty, peers, and, often, community members about substantive matters over extended periods of time.
- Students receive frequent feedback about their performance.
- Students see how what they are learning applies in different settings on and off campus.

Participating in one or more of these practices in the context of a coherent, academically challenging curriculum that appropriately infuses opportunities for active, collaborative experiences deepens learning and helps students interrogate their values and beliefs and how they may be altered, refined, and developed through these experiences. It also increases the likelihood students will experience diversity through contact with people, thoughts, values, and beliefs different from their own. In addition, students develop the ability to take the measure of events and actions and put them in perspective.¹¹

So how do colleges and universities go beyond grades to demonstrate to employers and a variety of other audiences interested in the value of higher education the knowledge students have
gained by engaging in HIPs? The following are some ways to create more opportunities to show examples of student achievement and abilities and allow others to independently judge the quality of the learning.

**ePortfolios** are a medium designed to encourage integration of learning across all or parts of students’ educational pathways—courses, curriculum, cocurriculum, jobs, travel, community-based projects, evaluations and feedback from reviewers or graders, and their own reflections on how specific activities (a paper or performance) demonstrate their mastery of a specific learning outcome. Stanford University, for instance, links undergraduate college transcripts to examples of work from students’ ePortfolios to illustrate how students have applied their knowledge in a course context. The digital learning records captured within ePortfolios can be tailored to and shared with multiple audiences in multiple ways for multiple purposes, such as for graduate school admissions or job applications.¹³

**Comprehensive student records** (CSRs) can carry the imprimatur of the college as they capture and verify learning in the variety of ways that HIPs and other learning modes can provide.¹⁴ The CSR is essentially a digital student transcript that not only includes traditional courses and grades but also gives examples of student papers, lists participation in community-based programs, and notes contributions to research projects. IMS Global Learning Consortium’s development of standards for the CSR now allows for the consistency and transferability of learning around the world.¹⁵

**VALUE rubrics** and other validated tools for assessing the quality of learning outcomes can be used across a range of mediums and situations.¹⁶ The VALUE rubrics allow anyone to see the expectations for proficiency and can be used with various artifacts created by learners. In addition to seeing the learner’s self-evaluations or rubric scores from faculty, potential employers and other audiences can use the rubric standards to judge the quality of student work and learning for themselves.¹⁷

**Blockchain technology**, when applied to higher education, carries the promise of verification and certification of student learning. A record-keeping platform, blockchain allows participants in the chain to download and validate individual records. Those records—transcripts or project scores, for example—are permanent and cannot be altered.¹⁸

**Where does that leave us?** While higher education has been rapidly changing, its purpose of providing a liberal education to help students develop a sense of well-being and personal and social responsibility; strong and transferable intellectual and practical skills;
and an ability to apply knowledge and skills in diverse settings remains intact. If we fulfill our roles as educators, we will engender in our students the necessity for balance between the challenges of technology and education’s traditions and preservation of the past as essential for how humans and educational systems can sustain and inform the lifelong growth and development of new ideas, creations, and directions to enhance humanity and society into the future.

As technology continues to drive change in all areas of our lives, the message here is that there is no end in sight to balancing past learning and future needs. As the Burning Glass report concludes,

Automation changes every job over time, and if we don’t continuously move up the “human value curve” we can fall behind. . . . What’s different this time, however, is not only the pace of change but also the way that roles are being transformed by skills from unrelated functions workers aren’t likely to have picked up on the job. . . . In fact, the theme of “lifelong learning” is perhaps the biggest finding of the study. 19

In short, there is no dichotomous separation between the arts and humanities, and the sciences and the professions; nor are there “soft” as opposed to “hard” skills — instead, there is a broad range of essential skills, the acquisition of which is the purpose of college. There is an overwhelming need for liberally educated learners who have acquired the abilities to adopt, adapt, and integrate technology for the betterment of humanity and life.

When the purpose of college is providing a liberal education for its learners, those learners have many opportunities to prepare not only for the world of work but for lifelong learning in a global setting. As ongoing technological changes continue to shape the job market and the structures and relationships of information creation, dissemination, and production, college is the best resource we have for ensuring a healthy and vibrant future. 20

NOTES
16. For more information on VALUE (Valid Assessment of Learning in Undergraduate Education) rubrics, see https://www.aacu.org/value-rubrics.
Take it from an English-major-cum-CEO who’s been through the dot-com tech wars: The liberal arts prepare students for the problem solving, big-picture awareness, and innovative thinking needed for an executive career better than business classes alone.

My introduction to managing a company began in 1992. Late one night, my father phoned and asked me to take over the reins of his nascent Pittsburgh telecom equipment business, Tollgrade Communications. He needed to focus his energies on his other business, a struggling heavy-construction company. At that point in my life, I was working as a public-relations executive and had no formal business training. But I knew what to do. When presented with a problem, liberal arts majors read. We read everything. I headed to the Carnegie Library of Pittsburgh and checked out books on management, finance, accounting, electrical engineering, and manufacturing. I pored over telecom trade rags. Heck, I even bought a set of Tony Robbins’s motivational tapes.

Three years after my dad’s phone call, our company mounted a successful initial public offering on the NASDAQ exchange. Our angel investors realized anywhere from a three- to fourteen-time return, depending on when they invested. We opened at a share price of $14. In 2000, our stock blasted off to $300 a share, then split, rocketing our market capitalization to more than $2 billion.

Although I’d taught myself how to function as a CEO through my reading, I wouldn’t have been able to lead my company to this success without the lessons from my literature, history, and other liberal arts classes. Those courses helped me develop the soft skills I would need to adeptly manage employees and present business strategies to investors and customers. More than an understanding of financials and technology, during my time as a CEO, it was the ability to effectively communicate and plan that allowed me to navigate major business changes as we ushered in the internet age.

At Allegheny College—my alma mater and where I now teach—we are making business education more holistic by bridging it with an interdisciplinary approach. This approach ensures that students from a range of backgrounds who study in a variety of fields learn team-based approaches to problems, oral communication, ethical decision making, and myriad written communication techniques. As our global economy continues to change at warp speed, more institutions should consider how they can prepare future business leaders to have broad knowledge of the world, operate with a sense of ethical and social responsibility, be prepared to grapple with complex and diverse challenges, and quickly synthesize massive amounts of information in order to make sound decisions and keep their organizations nimble.

**An English major’s executive journey**

Of the approximately 1,921,000 bachelor’s degrees awarded in 2015–16, the greatest number—372,000—were conferred in the fields of business,
The winners of Allegheny College’s business pitch contest, the Zingale Big Idea Competition, receive prize money and advice from the judges on how to improve their business proposals.
according to the National Center for Education Statistics. But what will all these business-degree holders need to find a job? A 2018 survey of business executives and hiring managers commissioned by the Association of American Colleges and Universities found that oral communication, teamwork skills with diverse groups, critical thinking and analytical reasoning, complex problem solving, and information literacy are among the top skills sought by employers. As Rachel Reiser, assistant dean at Boston University’s Questrom School of Business, told the Atlantic in 2016, businesses are seeking employees with “the ability to think, the ability to write, the ability to understand the cultural or historical context of whatever business decision they’re making.”

In addition, a 2017 New York Times essay argued that liberal arts colleges “are the most appropriate institutions for training future business leaders.” In other words, businesses are seeking employees who graduate from business programs infused with the education that liberal arts colleges offer.

Every CEO, for instance, has to be a good storyteller to be successful. Throughout my time at Tollgrade, I needed to reduce complex business models to PowerPoint pitches lasting no longer than a standard television sitcom. In that short amount of time, I had to convince speculators that they could find El Dorado in their investment; convince customers that we could ease their pain; convince suppliers that the road to our office could be their legal Silk Road; convince salespeople they could summit mountainous sales goals like Hillary and Tenzing scaled Everest; and convince engineers that they could become the next Archimedes with their eureka discovery.

How did I prepare for these pitches? I drew, for one, on my undergraduate film course. As I used PowerPoint to tell our company’s story, not only to raise start-up capital but also to orchestrate our successful IPO, I remembered how one of my English professors, Lloyd Michaels, showed that effective dramatization and visualization were some of the most powerful forms of communication. I also remembered how my creative writing professor, Alfred Kern, taught me to weave a narrative that people—whether lovers of literature or customers, investors, suppliers, or employees—could embrace. Kern showed me that great writing is not a gift but a skill that needs to be doggedly practiced. He taught me perseverance—vital, since building a business is a race for the steady more than the swift. Another lesson that served me in my business endeavors was history professor Jay Luvaas’s admonishment that, as Shakespeare wrote, the “past is prologue” and that many ways exist for exploring the nature of history. This led me to study past economic trends in order to separate the wheat from the chaff in the modern business problems I faced daily.

I learned, too, the importance of applying lessons from philosophy and ethics courses. Aristotle, Plato, Thomas Aquinas, and others set moral principles to govern human behavior. Those principles also make good business sense and should be part of every future CEO’s business education. For example, on more than one occasion, my company chose to be up-front about a defective batch of our product and eat the cost of replacing it. We ended up forging even stronger relationships with our customers. In another example of an ethical decision that turned out to be a wise financial move, at the end of 1999, we turned down a merger transaction with a much larger company. Not only did we realize that the valuation did a disservice to our shareholders, but we also saw that the incoming owners sought to displace some of our best managers. Six months later, our market capitalization soared to $2 billion.

Today’s business leaders cannot stay sequestered in the boardroom and make decisions in a vacuum. Executives are called upon to step out and lead the way in a global economy, and they are often asked to speak to issues or make decisions that affect an organization’s reputation. When Tollgrade first entered the global marketplace, for instance, we acted like many “ugly American” companies. We strode into meetings in our khaki pants and blue blazers as we sought to sell our whiz-bang telecom products. As Americans, we didn’t fully grasp the significance of the cultural differences in business practices. We weren’t able to establish a significant local
presence until we either partnered with or acquired companies already doing business with telecom companies outside of the United States. We realized that we needed to hire sales and marketing executives who not only spoke the native language of our customers but, more important, also understood their social norms. We couldn’t use a one-size-fits-all structure for joint ventures and instead had to adapt our approach based on our customers’ needs.

**Raising the bar**

In 2017, Allegheny College conducted a gap analysis between its offerings and those of top-rated university business programs. What we found was that analytical skills, team-based management techniques, and communications skills were of paramount importance. As a result, Allegheny created a liberal arts–centered business major with a heavy emphasis on economics. We also expanded a robust set of co-curricular activities at our Thompson Center for Business and Economics.

The business program also serves as a socioeconomic ladder for a diverse group of students who begin to see how entrepreneurship can help them prosper in life. Of Allegheny’s incoming first-year students, 30 percent meet the eligibility requirements for receiving a Pell Grant. The past four of our incoming classes have been the most diverse in our history. In 2006, less than 10 percent of the student body was made up of people of color. In fall 2019, 26 percent of the incoming class was made up of people of color. In 2018, four of the eight winners of our Shark Tank–like entrepreneurship program, the Zingale Big Idea Competition, were students of color.

Although the college has offered a managerial economics track for more than a decade, its new business major features liberal arts electives to complement a core curriculum heavily based on economics. The emphasis on the rigorous study of economics is also a key differentiator from other institutions’ programs. Allegheny’s business major incorporates core economics coursework in microeconomics, macroeconomics, managerial economics, financial accounting, and economic statistics. It offers business electives in money and financial institutions, finance, marketing, advertising, human resource management, entrepreneurship, nonprofit management and social entrepreneurship, international business, and accounting.

The liberal arts element of the business major comprises electives in rhetoric and communication, advanced public speaking, literature, French, Spanish, ethics, business and management ethics, and three other philosophy courses. Students also have the ability to study abroad and engage in community-based service-learning projects. We also teach job-hunting skills and arrange for employers to interview students on campus.

In addition, the Thompson Center for Business and Economics (created through a generous long-term commitment from Bank of America vice chairman and Allegheny alumnus Bruce R. Thompson) enables students to participate in business-focused cocurricular activities. The center simulates a stock-trading floor using a trading lab outfitted with Bloomberg terminals, which allow students to follow real-time financial information. During the center’s Lunchtime Learning series, noted alumni executives share their journeys up the corporate ladder, talk about their industries, and offer insight on how new employees can break in. The center also facilitates exploratory trips to New York City, Pittsburgh, and Cleveland, during which students visit different companies and meet alumni working in those industries. One excursion involved visiting the Cleveland Federal Reserve.

The center’s annual executive roundtable panel discussion assembles nationally known experts to discuss timely business issues. For 2018, we adopted the theme “The Year of Women in Business,” and all of our speakers that year were noted women executives who discussed their careers.

**Student big ideas**

For one of its most interactive cocurricular experiences, the Thompson Center hosts an intercollegiate business pitch competition called the Zingale Big Idea Competition. Winning students receive a collective $20,000 in prize money and gain valuable input from the contest’s judges on how to make their businesses better.

One of the 2019 winners, Natalia Buczek, was an art major. Because her father suffers from Alzheimer disease, she was driven to

**Today’s business leaders cannot stay sequestered in the boardroom and make decisions in a vacuum. Executives are called upon to step out and lead the way in a global economy, and they are often asked to speak to issues or make decisions that affect an organization’s reputation.**
create AidMemoir, an iPad application to assist the caregivers of people suffering from memory diseases. She partnered with computer science major Christopher Miller to create the app, which is not yet commercially available for purchase. During the development process, she and Miller demonstrated the functionality of the app to medical professionals at the University of Pittsburgh Medical Center. Based on their feedback, she and Miller revised the app, which originally helped only patients, to serve both patients and caregivers after the progress of the disease made it difficult for patients to use the program.

Another of the 2019 winners, Christian Walker, developed Animatr Apparel, an anime-inspired line of streetwear that includes hoodies, sweatshirts, and T-shirts. Walker had first competed in the contest in 2018, but his entry that year didn’t make it past the first round. He spent the following year developing his business based on the judge's tough feedback. During his 2018 summer break, he sharpened his business skills at the eCenter@Lindenpointe, a business incubator based in Hermitage, Pennsylvania, and ended up generating more than $5,000 in sales in less than ninety days.

“The general skills students hone in a liberal arts curriculum—writing, speaking, analyzing problems from multiple perspectives, collaborating, creative thinking—are essential skills for success in business and pretty much every career,” says Hilary L. Link, president of Allegheny College. “Wouldn’t you want your CEO, marketing manager, or sales associate to know how to do that?”

Not just business as usual
In addition to Allegheny, many other colleges and universities are bridging traditional business programs and courses that help students acquire broad knowledge and skills as they prepare for dynamic executive careers.

Bucknell University recently rebranded its School of Management as the Freeman College of Management with a mission to “work collaboratively, as a learning community, to understand organizations, analyze them rigorously, and devise creative and morally responsible solutions to the challenges they face.” Majors include management for sustainability; global management; and markets, innovation, and design. Students take a core set of management courses and electives in subjects as far-ranging as geography, international relations, political science, sustainability, mathematics, data analytics, marketing, innovation, and design. The program also offers experiential learning opportunities through cocurricular activities such as a business pitch competition, collaboration with the university’s Small Business Development Center, and portfolio investment management by students of close to $2 million of the university’s endowment.

Grove City College, a Christian institution in Pennsylvania, offers an entire major focused solely on entrepreneurship that embraces “redemptive entrepreneurship,” for which students are “motivated by their faith to use their gifts and earned wisdom to create new ways to meet society’s needs and desires, to serve God, to renew a broken culture, and lift a fallen world,”
“Our students are eager to create innovative businesses and organizations that have real impact, not only economically and socially but in ways that foster positive spiritual and relational effects in people’s lives,” says Tim Sweet, associate professor and chair of the college’s entrepreneurship department.

In addition, the college’s Center for Entrepreneurship and Innovation, which is open to all students regardless of major, provides a range of experiential learning opportunities, such as business model creation in its VentureLab, business plan competitions, and engagement with partner organizations including the curricular-development organization, Praxis Labs.

Westminster College, a liberal arts college in New Wilmington, Pennsylvania, offers an undergraduate business degree and an online MBA that focus on successful entrepreneurship with an emphasis on management, marketing, organizational behavior, and change leadership. Undergraduate business students complete a senior-year capstone project by participating in the online Business Strategy Game, which simulates the management of an athletic footwear company, according to Eric A. Gaber, executive-in-residence at Westminster College. The online platform enables Westminster students to compete not only with each other but also with students in other countries.

The college also offers one-on-one mentoring programs with more than fifty C-suite business leaders, according to Gaber. Students may also compete in regional business plan competitions, as well as participate in the En-Act-Us program, a group of student, academic, and business leaders. The David W. Edward Entrepreneurship Scholarship competition requires Westminster students to present a business plan for a new or improved business, product, service, or combination of the three. Additionally, an elevator pitch contest requires students to prepare various modes of entrepreneurial presentations. “We are creating an environment that is focused on a ‘pracademic’ approach. In this manner, we are offering participants real-world applicable experiences,” Garber says.

The ability to adapt
In the tech space, executives embrace the notion that “speed kills,” meaning that you need to stay ahead of the market. Just think of what tasks your cell phone could do ten years ago compared to what your smartphone can do today. Today’s business leaders must also navigate the shifting currents of world markets that are growing in countries such as China, Mexico, Japan, and Russia. Global marketplaces mean managers must understand various cultures to adapt strategies to fit disparate markets while communicating their corporate vision to employees and stockholders alike. Twenty-first-century business executives also have to know how to manage employees from different cultures with various worldviews and be equipped to face ethical decisions that affect people and their health, the environment, and geopolitical issues.

Business leaders must keep up with the speed of technological and global change. And what could be more crucial than the ability to understand how to draw on your intellectual training in order to adapt? The ability to teach oneself—the true gift of a liberal education—is paramount.

NOTES
CHRISTEN ARAGONI

How to Get to NASA and Other HIP Advice

Librarian Caroline Coward talks about what the Jet Propulsion Laboratory looks for when hiring

NASA’s Jet Propulsion Laboratory (JPL) in Pasadena, California, isn’t looking to hire “übernerds but global citizens and lifelong learners—full-fledged people,” says Caroline Coward, the Library Group supervisor for JPL’s Enterprise and Information Systems Engineering Section. JPL wants sculptors and filmmakers as well as scientists, Coward explains, and employees need to be able to apply knowledge across the organization and demonstrate a variety of problem-solving abilities. Liberal Education’s Christen Aragoni spoke with Coward about her own career journey, the importance of high-impact practices, and what employers—specifically NASA and JPL—look at when hiring interns and recent graduates. Hint: it’s not SAT scores.

Let’s start with how you ended up at JPL.

Most of my career in librarianship has been spent in higher education, and I’ve also worked for a couple of public libraries. Before coming to JPL, I was the information literacy coordinator for California State University–Dominguez Hills (CSUDH). I had started to feel like I should get into library administration, and I began looking for opportunities at academic and public libraries. The position at JPL just kind of came up, but when I read the job description, I thought, “I’m not what they’re looking for”—I had no federal experience, no specific science experience, nothing in my background that said, “Oh, yes, you should be working for NASA.”

I sat on it for about ten days. But the role had everything I was seeking: overseeing the library’s daily operations and its staff and setting policy to move the library forward and make sure it has the collections the people at JPL need. A couple of weeks after I applied, I got an email inviting me for an interview. My jaw hit the floor. I called to make sure that they hadn’t emailed the wrong person, and they said, “You have a combination of skills and abilities that we’re very interested in.” The interview was lovely, but I left convinced that they were really looking for someone with all kinds of space science experience. When I was invited back for a second interview, I was mystified. But the boss of the person who eventually became my boss had seen that I had been deeply involved with high-impact practices (HIPs) at CSUDH, and he was very interested in how HIPs were assisting underrepresented students. We had a good conversation about HIPs and curriculum development. Again, I left thinking, “Very nice, now, back to looking for another job.”

No one was more surprised than I was when they offered me the position. That was about two and a half years ago. I have since learned why they wanted me. They’d had a supervisor in place for several years who on paper had all the credentials—he’d worked for a national lab, he’d worked in science, he had a background in technology and engineering. But he was retiring, and they wanted someone who could do communication, outreach, and marketing and really connect with library users and find out what they needed. That evidently was

There’s a place for everyone at NASA, regardless of your training. We’re also very proud of our diversity in gender, language, religion, and culture. It is recognized across the enterprise that diversity of thought always produces a better product.

CHRISTEN ARAGONI is editor of Liberal Education.
The view from NASA’s Cassini spacecraft as it dives between Saturn and the planet’s innermost rings, as imagined by an illustrator.
Most people might not realize that JPL has a library. What does the library do for JPL?

All ten NASA centers have libraries with healthy collections. They do reference and research help, collection development, and interlibrary loans. At JPL, we put on talks and lectures and also have a maker space, with two 3D printers. We have a couple of Microsoft HoloLens augmented reality visors that we circulate just like books. In addition to these more traditional library services, we have huge repositories of technical reports, papers, plans, drawings, special publications, and other internal NASA information that people use to complete assignments like flight projects.

There’s a third aspect to the JPL library, which I see as the future of librarianship, especially academic librarianship. We help organize institutional information, which is often in data repositories that are walled off from each other. The FAIR data principles are Findability, Accessibility, Interoperability, and Reusability: What are your search functions? Are you able to find what you’re looking for and then access and use it once you find it? Are people across the organization able to use that piece of information, or is it siloed and locked down? Are you able to reuse that information over time and ensure it is preserved?

How did your liberal education help you land your first library job?

My bachelor’s degree is in music performance from California State University–Long Beach. When I graduated, I quickly realized that I was not going to be the Los Angeles Philharmonic’s next cellist—I’ll leave that to the people who practice eight hours a day. And I needed more stability than freelance music. I was working for a music store and not having a good time in retail. On my commute, I would drive by the local public library branch. Now, as a music major, I’d spent most of my under-graduate years in a soundproof practice room, and I’m embarrassed to admit that I went to the library maybe twice. So, I was looking at this little public library, thinking, “I wonder what goes on in there. People do work there and get paid.” I walked in and said I wanted to apply for a job.

They gave me a list of the ten most frequently asked questions at the reference desk and instructed me to write down not the answer to the question but where I would find the answer. I am blessed with a near-photographic memory, and so, I remembered the names of most of my textbooks from my general education courses, which I really loved. In answer to some of the questions, I wrote down the name of my art history textbook, my physical sciences

I’m the chair of the JPL Ontology Working Group, which looks for not just technological solutions but also more concrete solutions for sharing information. I call this twenty-first-century information science. It’s an untapped area, and JPL is actually quite unique in doing this work. I see the JPL library as a model for higher education, because most universities have stores of data that either only a few people can get to or only a few people know about. There’s a solution: put your librarians to work organizing the institution’s information, and make sure it adheres to FAIR data principles, so you can save a ton of time and money finding the data you need in order to use it. One thing about classic data science is that it’s mostly populated by computer scientists, who are all about clean code. You absolutely need that, but what’s often missing is a focus on the user—on who is going to be using the code or information, adapting it, folding it into their own project. This is the public service and customer service aspect in which librarians are heavily trained.

I see the JPL library as a model for higher education, because most universities have stores of data that either only a few people can get to or only a few people know about. There’s a solution: put your librarians to work organizing the institution’s information.
textbook, and my astronomy textbook. Then I went back to my job at the music store, thinking that was that. But I did really well on the quiz, and they wanted to interview me the next time they had an opening—which they did, about two months later, for a reference assistant. They hired me, and I worked at the reference desk helping people find information. My first library patron was a six-year-old looking to identify a leaf off a tree. I had a blast.

I had a real affinity for the job, and I became quite good at it, and so I did that for five years. Then I went and earned my master of library and information science degree through San Jose State University’s satellite program at California State University–Fullerton. If it hadn’t been for my general education classes and that quiz, we wouldn’t be having this conversation, and I would probably be working someplace very different.

Some people might think, “Well, you didn’t need a STEM background to work at JPL because you work in the library, so that’s different.” But what about other roles at JPL and NASA—do you have to have a STEM background? Who is JPL looking for?

The majority of the people at JPL and NASA are working in science fields, but a good percentage are folks working in business, contracts, facilities, transportation, logistics, photography—we have a team of artists who build interactive and science-based art installations with LED lights. They also design posters and create murals that have scientific information embedded in them. We have screenwriters and filmmakers, too. We just won our second Emmy for a documentary we did here at JPL. There’s a place for everyone at NASA, regardless of your training. We’re also very proud of our diversity in gender, language, religion, and culture. It is recognized across the enterprise that diversity of thought always produces a better product.

To get your foot in the door here at JPL or across NASA, you have to be the best at what you do. Having a little bit of experience under your belt really helps. If you’re right out of school, we look for people who have had interesting internships. When we do our summer intern program, we get thousands of applications for about eight hundred positions. In order to put yourself at the head of that line, you have to have something that really stands out. It’s not enough to have your classic, weighted 4.0 GPA and a long list of Ivy League internships. You have to stand out, and there are a couple of things that we look for, such as demonstrated learning. Have you built something? Did you rewire your parents’ house, so that it lights up in purple every time they open the door? Did you build a sculpture out of hula hoops and make it move by itself? Did you do something really cool that you can show us, some kind of hands-on learning?

We’re also looking for the ability to problem solve in a variety of ways. We’re all familiar with the classic list of soft skills, but we’re looking for even softer skills, things like grit, tenacity,
curiosity, and creativity. One of my favorites is enterprise-wide thinking, which is getting the blinders off and not just thinking about your team deliverable or the work product but how what you’re doing applies to the entire organization. If we recognize tenacity and creativity in someone who has built that hula hoop sculpture that moves on its own, we’re going to say, “Hey, we can leverage that to send our next robot to Mars.” Whatever it is that you do, whatever your superpower is, really, we want to know about that. So, yeah, you need the grades, you need the coursework, you need the letters of recommendation, but then there’s your superpower.

**How do educators foster things like tenacity and curiosity?**

HIPs go a long way for not only fostering those qualities but also recognizing and discovering them in students. This demands creativity from classroom faculty, even if they’re already doing HIPs such as learning cohorts, study abroad, or undergraduate research. Creativity in developing and applying HIPs will go a long way in giving students a leg up and a spot at the head of the line to come to a place like NASA.

Here’s an example of the creativity I mean: a university wanted to offer study abroad as a HIP, but it had a large number of Dreamer and DACA students who couldn’t leave the country. How do you achieve a similar impact as studying abroad? What is the secret sauce behind studying abroad? Is it the fact that you go to another country? No, it’s that you get an immersive cultural experience that’s very different from your own. The university flew their students to the Southwest United States and had them live on a reservation with the local indigenous population. The students spent a couple of weeks doing service-learning and cultural projects. This is the next generation of HIPs. We need to put our heads together to figure out how we can replicate the secret sauce behind a particular HIP, given our restrictions and our parameters.

**Can you talk about the importance of low-tech abilities versus high-tech ones?**

A lot of students are coming out of universities, especially the better-funded universities, with all kinds of technical knowledge. Many are really adept at using the latest and greatest tools. It’s all very impressive, but what if you’re in an environment that doesn’t have that kind of technology or requires something completely different? Interns and new hires can’t be thrown by that. So, another softer skill that I want to mention is adaptability. Often, low tech is the common denominator between two working groups. They might have their own technology that they work with, but if they have to work together on a project, sometimes a whiteboard, or the back of a napkin, or an overhead transparency is what they’re stuck with. You have to be comfortable with that. You have to have really good low-tech skills as well as high-tech skills—we’re looking for both.
**Why is college group work problematic, and what can educators do?**

In higher education, group work is an assignment with a deliverable at the end. Everybody in the group is in the same class, is usually around the same age, and has about the same level of experience. It’s a homogeneous group, and everybody’s talking the same language and working toward a common goal.

In the workplace, it’s the exact opposite. A working group can involve people from disparate teams. You have to be able to communicate outside of your discipline. You can’t keep talking at the same level—you have to be able to communicate what you’re doing to people who are very, very smart and highly educated but who might not have any idea what you’re talking about.

The range of ages is also a huge factor. You’re often working with colleagues who are younger and older than you are—people who have decades of experience in the organization, people who are right out of college. It’s a heterogeneous environment, and I wish that higher education would clue into this, and really bust up team-work or group work in their undergraduate courses: bring in a staff member to work with, bring in a graduate student, have a mixed class of freshmen and seniors so that they can learn from one another. Anything that you can do to break free from the classroom will make group work more impactful.

**Why is failure so important?**

Everybody’s too afraid to fail. Everybody is nervous that they have to get it right the first time. No, you don’t. At NASA, one of our mottos is “Fail fast.” Fail fast, learn from it, and go forward. We throw a lot of darts at a board here at NASA, and maybe one dart hits it. We document it, figure out how to do it better, share results, and try it again. We experiment. I’m a big fan of pilot projects. Take it small, and see what works, what doesn’t work. See if it scales. Fail early, fail fast, so that you’re not failing when you’re on the way to Mars.

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**Creating Space for Democracy**

*A Primer on Dialogue and Deliberation in Higher Education*

**Edited by Nicholas V. Longo and Timothy J. Shaffer**

We live in divisive and polarizing times, often remaining in comfortable social bubbles and experiencing few genuine interactions with people who are different or with whom we disagree. Stepping out and turning to one another is difficult but necessary. For our democracy to thrive at a time when we face wicked problems that involve tough trade-offs it is vital that all citizens participate fully in the process.

We need to learn to listen, think, and act with others to solve public problems. This collaborative task begins with creating space for democracy. This book provides a guide for doing so on campus through deliberation and dialogue. This book describes collaborative and relational work to engage with others and co-create meaning.

“Reaffirming higher education’s civic mission, *Creating Space for Democracy* issues a compelling enjoiinder for colleges and universities to play a leadership role in fostering participatory democracy. Positing college and university campuses as vital sites for democratic engagement, the authors in this volume offer tools for speaking across differences, while providing innovative models for revitalizing democracy through dialogue and deliberation, both within and beyond the gates of the academy.”

—LYNN PASQUERELLA

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The National Security Threat

The failure of American education to prepare students for the future

America is in peril, and there is reason to fear for our future. The peril stems from our fundamental and profound ignorance about the rest of the world. Let me illustrate.

From 2010 to 2017, I served as president of the American University of Nigeria, a private university founded in 2003 based on the US model of university education. Since returning from Africa, I get asked over and over again questions like, “When you were in Nigeria, did you meet my cousin who is in the Peace Corps? He’s in Tanzania.”

Africa is a huge continent. In terms of land size, you could fit all of China, India, the United States, and Europe into it. Getting asked questions that demonstrate a lack of the most basic understanding of Africa is a reminder that when it comes to geographic literacy, we in the United States generally flunk. And it matters.

Around the world, governing is getting harder and the nature of conflict is changing. The global economy is shifting, and in wealthy countries the working-age population is shrinking. In 2013, the most populous countries were China, India, the United States, Indonesia, Brazil, Pakistan, Nigeria, Bangladesh, Russia, and Japan. But by about 2050, just thirty years from now, the world will not look the same. India will have the most people, followed by China. The United States will no longer be third. Instead, Nigeria will be. And three of the ten top countries in the world, in terms of population, will be African.

Economic growth and wealth will also change dramatically. Right now, the United States is number one in terms of gross domestic product. Reliable estimates predict that by 2050 China will be first, India will be second, and the United States will have dropped to third place. Indonesia and Brazil will be next. How much are we teaching about Indonesia and Brazil? For that matter, who could pass a quiz about China or India?

The continuing acceleration of technological change will cause more discontinuities. It’s predicted, for example, that in the next twenty or so years automation may eliminate or replace, on average, 57 percent of jobs worldwide. Fifty-seven percent. It is estimated that in China, 77 percent of jobs will be automated. In Ethiopia—which will have reached the dubious status of tenth-most-populous country—85 percent of current jobs will be automated. The disruption, the challenge, is going to be enormous both for those countries and for the international order. Even as jobs are lost, we don’t know what jobs might be created, and whether there will be enough of them. And if there aren’t?

As our students know, climate change poses some of the biggest threats to our planet’s biosphere and to humanity. Many parts of the world, including the United States, are already seeing the effects of climate change. In the past twenty years, climate-related and geophysical disasters led to the deaths of 1.3 million people. The varied impacts of climate change are legion. Limited natural resources, such as drinking water, are likely to become even scarcer in many parts of the world. Crops and livestock will struggle to survive in climate change “hotspots” where conditions will become either too hot and dry, or too cold and wet. This will threaten livelihoods and food security. People have been forced, and will continue to be forced, to abandon their homes. New displacement patterns and competition over depleted natural resources can spark, as they have sparked, conflict between communities, and they can compound pre-existing problems. While most people affected

We must evaluate the programs, policies, and courses at our campuses—our extraordinarily important campuses—and ask ourselves: are we truly preparing our leadership for our future world? If not, what do we plan to do about it?
Dickinson students conduct ethnographic fieldwork in Nepal as part of a semester-long global mosaic, an interdisciplinary research program that encourages students to reflect on our diverse world as they engage in collaborative work with local, transnational, and international communities.
are currently remaining within their national borders, displacement across borders already occurs, leading to conflict and to violence. That they will continue to move seems likely. In short, the magnitude of the effects of rapid global climate change will be unprecedented, and we know that they are only going to intensify.

That is the challenging world that our students will face, a challenging world that they will eventually lead. And most of those challenges will be global. It is our responsibility as educators, whether as faculty, staff, or administrators, to make sure that our graduates are prepared for this new world—including filling United Nations positions and other international positions in government, as well as in the private sphere, that are so critical for our country. How well are we preparing them?

Global literacy

A May 2016 global literacy survey of college students conducted by National Geographic and the Council on Foreign Relations showed significant gaps between what young people understand about today's world and what they're going to need to understand to successfully navigate it. In a random sample of around 1,200 respondents aged 18 to 26, the average score on the survey's knowledge questions was a failing 55 percent. Mind you, these are college students. Just 29 percent of respondents earned a minimal passing grade of 66 percent correct answers or better. Just over 1 percent of respondents scored 91 percent or higher. The questions weren't particularly hard. One question, for example, was whether over the past five years, more Mexicans had left the United States than had entered it. Only 34 percent correctly responded that more had left. In another question, only 30 percent of respondents knew which branch of the US government (the legislative) has the power to declare war.

The survey also asked participants how much of their knowledge on global topics came from their college studies. Brace yourselves. Only 11 percent responded, “a great deal.” Seventeen percent said, “a lot,” and 34 percent, “a moderate amount.” Twenty-six percent said, “a little,” and 12 percent, “none at all.” None at all. Students were most likely to say that current world events were “extremely important,” followed by US government and politics, then economics and finance. Only 25 percent said world history was “extremely important,” while 22 percent said international relations, 20 percent said non-US cultures, and 19 percent said geography.

As Richard N. Haass, president of the Council on Foreign Relations, and Gary E. Knell, president and CEO of the National Geographic Society, state in their foreword to the report on the survey, these survey results come in an era of globalization, when the world is characterized by enormous cross-border flows of everything from people and ideas to weapons and pollutants. American citizens are affected in fundamental ways—in legislative bodies, boardrooms, and the environment—by what happens in the world. All of this makes an educated public essential for American economic competitiveness, national security, and democracy. To contend for jobs, assume leadership positions in government and other sectors, and hold elected officials accountable, young people must understand the global context in which they operate as citizens and professionals. Yet our survey shows that many individuals educated in this country do not.

This constitutes a major national challenge. So how do we increase interest in world study? We know that study abroad makes a difference, but only about 10.9 percent of all undergraduate students, and about 16 percent of those earning a bachelor’s degree, study abroad at some point in their undergraduate career. This is according to the Institute of International Education. The biggest boost in study abroad is through short-term programs, increasing to 64.6 percent in 2017–18. And while study abroad programs have made some progress in racially and
ethnically diversifying participation, they are still a long way from reflecting the diversity of enrollment in US higher education as a whole, which is now about 42 percent nonwhite.

Another challenge with study abroad is that most students are not studying in the countries that will soon be in the top ten in terms of population and GDP. In general, students (54.9 percent of them) are still going to Europe. Only 14.9 percent are going to Latin America and the Caribbean, 11.2 percent to Asia, 4.2 percent to sub-Saharan Africa, and 2.1 percent to the Middle East. It’s really crucial that we get students out to the parts of the world that are going to be so important in their lifetimes and to their futures.

**Internationalization on campus**

At Dickinson College, in Carlisle, Pennsylvania, we have something pretty extraordinary going on: 67 percent of our 2018–19 graduating class studied abroad. Faculty members are key to this high participation. Given our curricular focus on global education—we offer instruction in twelve foreign languages and roughly half of our courses have international content—it’s virtually automatic that most faculty hires have international training and interests.

Once at Dickinson, faculty members have multiple opportunities to enhance their own internationalization. One major opportunity is the chance to lead a study abroad program. Some of these programs, such as globally integrated courses that include several weeks abroad, are short-term. Others, such as serving as resident director at a Dickinson abroad site, last two years or more. For our abroad programming, we make a special effort to include faculty from disciplines that are often underrepresented in internationalization, such as the sciences. Approximately 40 percent of our faculty have led study programs abroad. And, of course, faculty contributions to the college’s global efforts are valued for tenure and promotion and for merit salary increases.
Dickinson is also privileged to be located next to the US Army War College. We have drawn not only on the War College's faculty but also on its international fellows, senior military officers who hail from seventy-five different countries. In Carlisle, we've had incredible faculty and student exchanges, which have enriched and broadened our views and helped internationalize our campus and our whole community. As part of their study at the War College, international fellows are required to write research papers. Dickinson’s Writing Center is one of the only such programs in the world that can offer them writing instruction and assistance in eleven languages. Our student tutors critique and help the fellows, and while students are sometimes initially nervous about advising these military leaders, they learn to collaborate and build strong relationships that benefit all parties.

Students coming from abroad also contribute to internationalizing campuses. But while the number of students worldwide studying outside of their home country has more than doubled since 2001 (from 2.1 million to 5 million), the percentage of those students coming to the United States dropped from 28 percent in 2001 to 22 percent in 2018, according to NAFSA: Association of International Educators. This is a troubling statistic. NAFSA estimates that between 2017 and 2018, the combined 10 percent decline of international student enrollment not only hurt our campuses, and our efforts to globalize, but cost the US economy $5.5 billion and more than 40,000 jobs.\(^9\)

Why are fewer students coming to the US? The top reason in 2018—for 83 percent of those surveyed—was worry about visa delays and denials. The number two reason for declining international student enrollment in 2018 was the social and political environment. Another reason is that international students no longer feel safe in coming to the United States, and they are concerned that if they do come, they won’t be welcome.\(^10\)

We need to really reflect on these data and on their implications for our efforts to internationalize our curricula and campuses.

Along with knowledge of the world, intercultural competency is an essential skill. Our community, nation, and world are full of people different from ourselves, people whom we misunderstand, of whom we disapprove, with whom we disagree. People from different “cultures.” America’s domestic polarization is one alarming example of this. Yet our lives in common—and our very survival—require that we be able to cooperate to solve problems and to live together. Live together in our communities, in our nation, and in the world. Working with other humans who differ from us in fundamental ways requires an intercultural skill set that is rarely taught. But it can be, and it should be.

Intercultural competency fosters a greater openness to other ideas and behaviors and establishes a foundation for greater civility and tolerance. It starts with critical self-perception and self-knowledge—the basis of a college education. One of the most useful tools in our curriculum is the AAC&U Global Learning VALUE Rubric, which is used to assess global learning over time on a programmatic level.\(^11\)

**Silver linings**

Despite all our challenges, there are reasons for optimism.

Let’s step back and look at some good news from the global literacy survey of college students. While the lack of global knowledge demonstrated in the survey results is both alarming and discouraging, still, 72 percent of respondents said that geography and world history, cultures, and events are becoming more important to them. Moreover, respondents did demonstrate knowledge about certain key issues, including about the environment. Seventy-eight percent knew that fossil fuels are a nonrenewable resource, and 84 percent knew that climate scientists consider the increase in atmospheric greenhouse gases due to the use of fossil fuels to be one of the biggest causes of climate change.\(^12\)

As we look at these data and the challenges ahead for the next generation and at everything happening in our country, it’s easy to become overwhelmed, to become cynical and disengaged. But as leaders, we don’t have that luxury. Obsessed with our problems, we usually focus less on how life is improving for millions of people around the world, and more on what is going wrong—on the murderer rather than on the scholarship winner.

Yes, we live in a world confronting great challenges. But we also live in a world of astonishing global progress. This view is not naïve; it’s backed by real data. In 1800, for example, 85 percent of the globe lived in extreme poverty; now that figure is down to 9 percent.\(^13\) In 1800,
44 percent of children died before their fifth birthday; in 2016, only 4 percent did. In 1800, the average life expectancy was thirty-one years. In 2017, it was seventy-two years. In 1800, only 10 percent of adults had basic skills for reading and writing. In 2016, 86 percent did.

If we could surmount challenges like high rates of infant mortality, illiteracy, and low life expectancy, we can certainly deal with climate change and other mounting global problems. But only if our students—our future leaders—are properly prepared. Successfully confronting our future is going to require a level of international cooperation and coordination unparalleled in human experience. It will require that the leadership of every sector of our society have the experience and skills to communicate and work with their fellow humans from around the globe—understand their problems and constraints, their resources and values, and their prejudices, dreams, and worldviews.

We are the educators of that leadership.

We must evaluate the programs, policies, and courses at our campuses—our extraordinarily important campuses—and ask ourselves: are we truly preparing our leadership for our future world? If not, what do we plan to do about it?

Let me tell you a story. As president of the American University of Nigeria, I spent seven years dealing with enormous tragedies created by the militant Islamic group Boko Haram, the atrocities of which include abducting Nigerian schoolgirls. Some of the students at AUN were those young women who had been kidnapped from Chibok and later escaped. I was privileged to have them at my university in Nigeria, and I'm even more privileged to have some of them at Dickinson with me now. Recently, I asked one of these women, young women who have faced challenges that few of us can even imagine, what her American education meant to her.

"Education," she said, "gives me the wings to fly, the power to fight and the voice to speak."

True in Nigeria. True in America. And absolutely crucial in the coming decades.

NOTES
10. NAFSA, Losing Talent.
16. “32 Improvements.”
Between 2013 and 2016, overall enrollment in language programs other than English dropped 9.2 percent, according to the Modern Language Association of America. Yet in our increasingly interconnected world, the ability to speak more than one language is becoming crucial. The following two articles offer models for career-focused language and internationalization programs—one at a large public university, the other at a community college.

NEDRA REYNOLDS

Something to Talk About

The University of Rhode Island’s multilingual graduates go global

At a time when language programs around the United States are in crisis—a recent Chronicle of Higher Education article reports that hundreds of programs have been closed in the past few years—the University of Rhode Island’s Department of Modern and Classical Languages and Literatures is realigning its curriculum to emphasize proficiency and intercultural competence within a strong liberal arts context. The result of the department’s recent initiatives? More than 750 students, nearly all of them in dual-degree programs, are majoring in one of five different languages: German, Spanish, Chinese, French, and Italian, with the option to minor in Arabic or Japanese.

Through a focus on language for careers, the university’s language programs have given students from a variety of majors experiences that prepare them to be bilingual engineers, diplomats, computer scientists, business executives, health-care workers, and other professionals in our multicultural, international economy.

Curriculum with an international focus

Innovation in languages at the University of Rhode Island (URI) has a long history. With the founding of the international engineering program more than thirty years ago, URI created a collaborative model in which colleges and departments create interdisciplinary programs with a global focus.³ The International Engineering Program combines a strong engineering program with immersion in a foreign language and culture. Students in this five-year program are required to spend their fourth year abroad, completing a mandatory semester of study at a partner university followed by a six-month internship in a company or research facility. While students benefit by becoming bilingual engineers, engineering firms benefit, too, by having cultural ambassadors in residence who can contribute innovative thinking from both their knowledge of two cultures and their training from within the arts and humanities that traditionally trained engineers may lack.

Other signature international programs include the International Business Program, the International Pharmaceutical Sciences Program, and the International Studies in Diplomacy (ISD) program, which is URI’s newest option and offers students coursework in economics and political science in addition to a target language.⁴ In all of these signature international programs (for which the language options vary), students develop a high level of language mastery, building vocabulary specific to their disciplines. They also have options to prepare for living and working in another culture by participating in short-term immersion experiences in summer or January before they spend either a semester or a full year abroad to study and complete internships at various companies in the host country. Examples include IBM in Milan, BMW in Munich, and Bayer Technology Services in Shanghai.

When Johanna Leffler first arrived at URI, she planned to double major in French and political science but switched to the new ISD program, seeing it as “the perfect fit because it prepares students to go into fields of diplomacy and international work, which is exactly what I want to do.” This academic year, Leffler will study French in Rennes, France, at the Institute of Political Studies, NEDRA REYNOLDS is associate dean of the College of Arts and Sciences and professor of writing and rhetoric at the University of Rhode Island.
with support from the URI Foundation’s Beatrice S. Demers Foreign Language Fellowship. Several other URI students have received the prestigious David L. Boren Scholarship, given by the National Security Education Program, to fund their study abroad, which is a vital part of becoming proficient in a foreign language.

“I really enjoy how almost every semester, key themes across my classes intersect with each other,” Leffler says about the ISD program. “I take classes from multiple disciplines for my program, such as political science, economics, history, and anthropology, so it’s really cool to see that interconnectedness.”

One 2018 URI graduate studied for six months at Universidad de Zaragoza in Spain, taking language and engineering classes all taught in Spanish, and then interned for another six months as a project manager for SEAT, an international car manufacturer in Barcelona. A 2019 graduate chose to minor in Arabic and spent nine months studying at the University of Jordan on his way to serve in the military. A Chinese Flagship student spent her capstone year in China and interned at an international engineering firm with an office in Shanghai. With these international experiences, students can pursue global job searches and showcase their adaptability and understanding of diversity.

The proficiency turn
In order to assess students’ language and cultural mastery, particularly in a way that demonstrates their abilities to future employees, URI’s language department has set specific benchmarks using proficiency guidelines from the American Council on the Teaching of Foreign Languages (ACTFL). Language majors undergo testing twice during their studies. In order to earn a degree in these international programs, students must not only study abroad but also achieve a required level of speaking proficiency on the ACTFL guidelines; for the ISD program, for example, students must achieve a minimum language proficiency at the advanced low (or B2) level or above to complete the ISD program.

To achieve the advanced-low speaking proficiency in the target language, students engage in communicative learning practices starting in their introductory-level language classes. Rather than a traditional grammar-focused lecture followed by drills, instructors flip the classroom so that students can prepare for a lesson through video tutorials. They then engage with their peers using the target language for situations they are likely to encounter when visiting and learning in a foreign country. In an activity that involves planning a journey by train from one foreign city to another, for example, students focus on formulating questions and building vocabulary for purchasing train tickets or asking for assistance in the target language.

Going forward, students may be tested for their proficiency level before and after studying abroad. But the ability to speak and be understood deepens with a rich understanding of the culture—what is considered appropriate, what the norms and expectations are, and how to show respect for differences; thus, some programs may also test for intercultural competence.

The data collected from these assessments will allow languages faculty to continue to adjust the curriculum to most effectively help students
learn. The department also recently hired LeAnne Spino-Seijas, assistant professor of Spanish, to help lead the proficiency initiative and Bing Mu, assistant professor of Chinese, who specializes in intercultural competence.

The entire department, representing a wide diversity of languages and research specializations, shares the common goal of ensuring that URI students will be prepared to use their target language in the workforce. Faculty members are updating courses as needed, undertaking training in testing student language proficiency, and implementing the proficiency testing, according to Spino-Seijas.

While a number of faculty members have backgrounds in languages and literature, rather than in second-language acquisition or linguistics, they realize that proficiency and intercultural competence is needed for current and future success in the global economy and that such study still requires the critical thinking, imagination, and empathy often associated with learning acquired in humanities courses.

“The liberal arts foundation students receive by learning the language, the literature, and the perspective of another culture,” says Sigrid Berka, executive director of the International Engineering Program, “builds not only intellectual skills like critical thinking and novel approaches to problem solving but also empathy and altruism.”

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8. Language Flagship programs are federally funded by the US Department of Defense and are a branch of the National Security Education program. There are currently 31 Flagship programs—for Arabic, Chinese, Korean, Persian, Portuguese, Russian, and Turkish—at twenty-one institutions. URI’s Chinese Flagship program is featured on https://thelanguageflagship.org/; “Chinese Language Flagship Program: Emily Hadfield,” University of Rhode Island, accessed October 4, 2019, https://web.uri.edu/chineseflagship/emily-hadfield/.


10. Assessing intercultural competency is still open to debate. One way to assess intercultural communicative competence (ICC) is to use an assessment tool like the Intercultural Development Inventory (IDI). By answering fifty questions, students are mapped on a continuum with monocultural mind-set situated on one end and intercultural mind-set on the other. This assessment tool can be employed in pre- and post-curricula, as well as pre- and post-study abroad programs, to look at students’ developmental trajectory. This assessment tool can be found at https://idiinventory.com. Some experts, however, consider the development of ICC as a process, and thus, the assessment of ICC would be steered toward assessing what authentic tasks students are able to do and to what extent they can participate in another culture. The assessment is carried out during the course as an ongoing process in which students participate in role playing and conduct real-life tasks.
JEWELL BRACHO never imagined that she would travel to places like Senegal and Peru during her community college career, but the internationalization initiative of the World Languages and Cultures Department at Normandale Community College put these life-changing experiences within her reach.

“These adventures in Senegal and Peru have expanded my knowledge of French and Spanish languages,” Bracho says, “and, most notably, built a sense of community and union with people completely distinctive from my own.”

In fall 2019, Normandale offered courses in six languages, the most of any two-year college in the Minnesota State System. The World Languages and Cultures Department’s Senegal and Peru study abroad courses reflect the Normandale internationalization team’s priority of preparing multilingual students and designing study abroad opportunities in countries that tend to be underrepresented in traditional world languages and cultures programs.

“Internationalization, or a coordinated approach to teaching global readiness, has existed in four-year institutions for quite some time,” says Heidi Kreutzer, chair of the World Languages and Cultures Department at Normandale. “It’s been exciting to create a customizable model for two-year contexts like ours.”

The study abroad courses are low-cost compared to many other options offered in two-year and four-year contexts, and Normandale’s foundation provides scholarships to supplement trip expenses. We also plan our travel courses well in advance, giving students time to prepare and save for them. Normandale students who participate in these programs spend several weeks on campus studying

JEN WESTMORELAND BOUCHARD is a faculty member in the World Languages and Cultures Department and coordinator of the International Experience Center at Normandale Community College.
the cultures and languages that will deepen their study abroad experience, which lasts fifteen days in the target country. When they return, students present a capstone project to peers.

For the in-country experiences, we partner with local organizations, such as École Internationale de Popenguine, a secondary school in Senegal, to give the students an avenue for forming authentic relationships with people from an entirely different part of the world. Students and faculty from both institutions share curricular and cultural resources, and we are in the process of developing a pathway for students from École Internationale de Popenguine to study at Normandale.

We have also developed study away (domestic) programs with an international focus, such as an upcoming trip to Miami concentrating on Haitian and Cuban diasporic communities. During this weeklong experience, students will meet Cuban and Haitian writers, artists, chefs, and other local luminaries who will provide insight into what it means to thrive in a diaspora community in the United States.

**Dynamic partnerships**

Accessible, high-impact study abroad and study away options are only one facet of the Normandale internationalization initiative, which aims to prepare students to thrive personally and professionally in diverse environments both within the United States and abroad. This work is directly informed by what we hear from employers in our community and around the globe: they need team members who speak multiple languages and possess the skills and perspectives that will allow them to work effectively with people from different backgrounds.

Two consecutive federal grants through the US Department of Education’s Undergraduate International Studies and Foreign Language Program have allowed Normandale’s internationalization team to implement internationalization at the community college level, and we strategically partner with faculty members, staff, and students across campus to ensure that international content is present in curricular and cocurricular activities.

Global partners in multiple sectors have opened up learning opportunities for students through exchanges, internships, and teleconference sessions on campus. For the 2019–20 Diaspora Speaker Series, for example, we are working with other departments and student groups to invite local and international experts to talk about topics related to the concept of diaspora. One upcoming speaker is Susan Brower, a demographer for the state of Minnesota, who
will talk about the history and current realities of Latinx communities in Minnesota. The event is a collaboration with the student-led Latinos United at Normandale in Action group. We also created the Normandale Diaspora Project (www.nccdiaspora.com), an online resource that centers the experiences of students, staff, and faculty who identify as being part of a diaspora community and that also helps foster dialogue and critical thinking in various classes and activities across campus.

**A sense of belonging**

Minnesota has the highest population of Somali immigrants in the United States, and Normandale, where 42 percent of students are students of color, has a large number of Somali-American students. Committed to serving the needs and interests of Normandale’s diverse community, the internationalization team created the first Somali area studies program of its kind at a community college. This credit-bearing program—which consists of two years of Somali language study (four courses) and one Somali culture and civilization course—is designed for anyone looking to learn about Somali language and culture, including heritage learners and professionals from the community.

The program has brought academic value to the college and also increased the sense of belonging among Somali-American students. “It makes me happy and heard knowing that my community is being represented in the courses that are being offered,” says Naimo Osman, a student who is part of the Somali-American community at Normandale. “I’m grateful that we are able to recognize our diversity on campus in ways that aren’t just statistics but through an interactive and educational model.”

The internationalization team also created an International Experience Certificate program that can supplement any area of study and that combines world language and culture courses, a study abroad opportunity, and an intercultural communication course. Current students pursuing the certificate are also in the process of completing associate degrees or transfer pathways in interpreting and translation, business, and nursing.

“Learning a language is important,” Kreutzer says, “but being able to understand cultural norms when it comes to various circumstances is also a big part of this certificate. Whether you are an educator, police officer, a nurse, a business person, or a professional in any number of areas, these are important skills to have.”

In addition, we have brought our international initiative into the community. Last summer, Chinese instructor Miranda Miskowiec worked with the filtration systems manufacturer Donaldson Company to design courses on Chinese culture, customs, and language. This program was developed through our Continuing Education and Customized Training Department, which works directly with organizations to create noncredit-bearing courses specific to their needs.

“We are happy to serve as a resource for businesses looking to increase their knowledge of languages and cultures that are critical to their success,” Kreutzer says.

**A strong commitment**

In order to conceptualize and sustain this multifaceted work, we have relied on the expertise of researchers and practitioners at the Global Programs and Strategies Alliance and the Center for Advanced Research and Language Acquisition at the University of Minnesota. By consulting with us on numerous occasions, they have helped us develop frameworks and long-term strategies to make our internationalization work sustainable and impactful for years to come. We have also maintained a strong commitment to sharing our own processes and best practices at national conferences, such as at the American Council on the Teaching of Foreign Languages annual convention.

The philosophy of the internationalization team at Normandale is “If something is working, we need to share it.” As we look at what is currently happening across the globe, it’s evident that there has never been a greater need for international education and programs that concentrate on developing intercultural understanding and competence.

During an upcoming trip to Miami, students will meet Cuban and Haitian writers, artists, chefs, and other local luminaries who will provide insight into what it means to thrive in a diaspora community in the United States.
FEATURED TOPIC

Work colleges offer ideas about providing an affordable liberal education and equipping students for professional success

ERIN MORGENSTERN

The Work College Way

Working while going to college is not a new concept. For the past twenty-five years, around 70 percent of college students have been holding down a job while enrolled. But high tuition fees and other expenses have made it impossible for today’s students to work their way through college to earn enough to avoid debt from paying for their education. Students from low-income families suffer the most: only one in two high school graduates from low-income families goes to college, and many opt not to attend because they don’t think they can manage the costs.

Nine liberal arts colleges—Alice Lloyd College, Berea College, Bethany Global College, Blackburn College, College of the Ozarks, Ecclesia College, Paul Quinn College, Sterling College, and Warren Wilson College—have found a balance in offering access, affordability, and workforce development for their students, specifically those from low-income families. These institutions are known as work colleges, as defined by the United States Code of Federal Regulations. At work colleges, students fill campus jobs (and, in some cases, community-service positions) in exchange for reduced tuition. The comprehensive work-service-learning programs at these institutions have a rich history of providing students with the means to earn a college degree and to become deeply prepared for future career success.

The labor programs also reduce overall campus operational expenses, allowing the colleges to continue offering attendees reduced costs for their education.

“It feels like never a month goes by without my reading some news article reporting that today’s college graduates are largely unprepared to enter and contribute to the workforce,” says Amanda Peach, assistant director of library sciences at Berea College. “Work colleges are uniquely positioned to answer this gap in skills and experience.”

Work colleges have been around for more than a century, and while each is unique, with their workforce development, mentorship models, and creative cost-reduction strategies, they are all doing what so many higher education institutions in our country are aiming to accomplish: providing their students with an affordable liberal education that offers the continued promise of lifelong success.

Berea busy

When it was founded in Kentucky in 1855, Berea became the first interracial and coeducational college in the South. Today it serves around 1,600 students, with 78 percent of them natives of Kentucky and Appalachia and more than half first-generation college students. The families of Berea students on average earn less than $30,000 per year. Nearly all students live on campus, with nearby housing for students with families.

In addition to attending academic classes, all students work a minimum of ten hours per week in one of the college’s 112 labor departments, earning a paycheck that helps them afford books, supplies, and other costs. They are also helping to run the campus as they fill positions everywhere from the library to the college garden. Students commit to a labor position for a year at a time, and in exchange...
The Berea College Farm serves as the main laboratory for many agricultural and natural resources courses. Students handle the daily farming operations with support from faculty and staff.
for their work, they receive a 100 percent tuition scholarship. (While neither Berea students nor their parents pay tuition, their responsibility for fees and living expenses is determined through the Free Application for Federal Student Aid.) When they graduate, students leave with both an academic and a labor transcript, which documents the hard and soft skills students acquire during their time at Berea.

Jackie Burnside, a Berea alumna and current professor of sociology, uses campus jargon like “the usual busy-ness plus” and “Berea busy” to describe the mentality of a student who attends the college. It takes some time, she says, for students to adapt to balancing academic and job responsibilities—each year as they move through academic levels, students also take on more work responsibility, such as supervising and training newer students in their job roles. They can also opt to work in student labor positions at nonprofit organizations in the local community.

Burnside’s own experiences as a Berea undergraduate developed her passion for teaching and research. Her first job as a first-year student at Berea was in needlecraft, sewing the faces on dolls (the college used to have an industry making stuffed toys). In her second year, she signed up to work for an organization that taught high school completion classes in nearby communities. As part of the program, she drove a college-owned car to the next town over to teach in a community center. One of her students was a single mother who subsequently earned her GED and then landed a job in a local factory, where she was able to progress because of her education. The experience inspired Burnside, though she did not pursue a career in teaching until she went to graduate school to earn her doctorate in sociology at Yale University. “I had all these nice intangible rewards to the job, intrinsic rewards to teaching, that you could continue to learn yourself, and you could see people who were welcoming of your assistance. That was really rewarding,” she says.

Today’s students also gain experiences and skills that serve them long after their time at Berea. After the first year, students select jobs to match their interests (many work colleges hold job fairs before, or during, the first week of classes), so they have the freedom to set their own paths and take on new challenges at their own pace. They also develop the soft skills employers seek: They learn customer service as they serve meals in the dining hall or work in the accounting department fielding questions. They learn flexibility, persistence, and resilience as they fulfill the yearlong commitments working in jobs they might not end up enjoying, particularly first-year students, who have less say over where they are assigned. They learn conflict-resolution abilities as they interact with colleagues. They develop time management skills because they must put in consistent hours per pay period and cannot simply work when it is convenient for them. In addition, students develop hard skills, such as proficiency with software programs and expertise in wood-working or ceramic pottery. They also earn certifications for different training programs, such as for handling blood-borne pathogens in housekeeping.

“We’re getting more students who don’t have the same kind of work opportunities at home, so Berea is the first time they’ve had a job,” Burnside says. “One of the big things is learning the value of self-discipline, showing up on time, being stable in their attendance and getting to work. Second is to learn how to ask questions, because there are so many things that they will not know, and to feel brave enough to ask the tough questions.”

Most work colleges use real-world interview selection processes to give students the opportunity to move up into leadership and management roles—job movement is not always possible at institutions using the standard federal work-study model, Peach points out. “The experience of interviewing for positions they desire rather than one they have, including creating a resume, dressing professionally, and presenting their best selves in an interview, is important preparation for the world of work after Berea,” she says.

Burnside tells the story of a student who worked in the Geology Department as an example of how labor experiences at Berea translate into jobs after graduation. The student assisted a geology professor who maintained a collection of different rocks and other materials in a geology museum. The student then supplemented that work with courses in art and technology where she made jewelry and learned to solder metal. “She could recognize different stones, as well as the artistic aspect of jewelry,” Burnside says. Because she was able to connect the work from her labor position with her
After their first year, Berea students select jobs in the labor program that match their interests. Most work colleges hold job fairs on or around the first week of classes.

experiences in the classroom, the student received a job after graduation with a jewelry company in New York City.

**Our junior colleagues**
At most work colleges, students receive feedback through performance reviews and also work with a mentor. At Berea, Peach says, students are treated much like full-time staff and faculty and develop close bonds with their supervisors. The role of a supervisor, Peach says, isn’t to write students up for no-shows or merely approve their time sheet or to assign them busywork to keep them occupied. Rather, “it is about envisioning ways to collaborate with them, just like I do with my professional peers,” she says. “By considering them my junior colleagues, I am inspired to dream up projects and experiences that capitalize on their skills and interests while also increasing the functionality and productivity of our library.”

Part of what helps foster the collaborative relationship between students and their mentors is the amount of attention Berea gives to training students in their labor roles, Burnside says. “It is a continuous learning environment on the work side the same way we emphasize on the academic side,” she says.

Each spring, Berea holds an awards ceremony to recognize students for achievements such as fulfilling their number of hours, receiving outstanding labor evaluations, and coming up with innovative ideas. Some students, especially seniors, receive monetary awards for demonstrating excellence in different areas. “It’s all part of continuing to help students become aware of the skills that they’re learning, the experiences they’re gaining in their work life at Berea, and rewarding them positively,” Burnside says.

On the flip side, students face penalties if they perform poorly at their jobs. For example, students who don’t complete their contracted number of hours are not eligible for a step raise—which might be a small amount, but which is still important, Burnside says. Also, when students apply for an internship or a program like study
In exchange for committing to a labor position each year, Berea students receive a 100 percent tuition scholarship. When they graduate, they leave with both an academic and a labor transcript.

abroad (which the college helps financially support), both their labor and academic records are reviewed. “If a student is not in good standing in labor, as well as academics, and character-wise and student life-wise,” Burnside says, “they’re not eligible.”

**Creative cost savings**

To continue to provide reduced tuition, work colleges use creative and innovative approaches to manage operational costs. One of the biggest cost-reduction strategies with a large return on investment is the employment of students in campus jobs ranging from undergraduate teaching assistants to grounds crew.

Berea’s undergraduate workers, Peach says, help the campus function on a daily basis. Computer science students, for example, developed the online software that allowed the college to transition from paper to digital student-labor contracts, making the process more efficient and sustainable. “Our students are not doing busywork,” Peach says. “There is dignity and room for advancement in all labor, including facilities maintenance and dining services.”

Another key to saving money at Berea is its 250-acre organic farm. Producing beef, pork, chicken, goat, and vegetables, the farm supplies 10 percent of the food eaten in the cafeteria and aims to supply 25 percent within the next ten years, further reducing the need to order food from a pricey external vendor.¹

Berea’s long-standing, billion-dollar endowment also ensures students can attend the college tuition-free. The endowment covers around 75 percent of annual operating expenses, and the college secures the rest—about $4.7 million—through intense fundraising efforts and other initiatives. To encourage students to give back early to the college, Berea created a payroll deduction program. Students can elect to have a small amount, such as $5 or $10, taken out of their paychecks to give to the college. In 2017, more than nine hundred students participated, giving back a total of $25,000 to Berea.⁴

**Beyond work colleges**

Work colleges have their own unique systems that help to support students, and while their overall structure may not be adoptable for other types of institutions, a number of state and institutional initiatives offer models for implementing ideas that parallel those at work...
colleges—such as workforce development and mentoring programs, particularly for students from low-income families. The following are a few examples.

**EARN Indiana:** The Employment Aid Readiness Network (EARN) helps students from low-income Indiana families receive off-campus workforce development opportunities. Eligible students have access to resume-building resources and experiential paid internships. Employers with an approved internship may receive up to 50 percent matching funds to hire an EARN Indiana student.⁵

**Ohio University PACE:** The Program to Aid Career Exploration (PACE) supports Ohio University students from low-income families, each year allowing three hundred eligible students to explore their career interests through paid positions. A committee of Ohio University faculty and staff review and rate PACE job opportunities, which are all located in Athens, Ohio.⁶

**Iowa GROW:** In 2009, the University of Iowa introduced Iowa GROW (Guided Reflection on Work) to the Division of Student Life to bring together mentorship and supervision through guided conversations between supervisors and their student employees. The division provides jobs to more than two thousand students annually, and the mentorship model was designed to make student employment a high-impact practice that causes students to connect their work with their classroom learning.⁷

### A work family

If a liberal education is an approach to aiding students in developing “strong and transferable intellectual and practical skills such as communication, analytical and problem-solving skills, and a demonstrated ability to apply knowledge and skills in real-world settings,”⁸ work colleges are the epitome of such an approach to education. As higher education institutions continue to feel the strain from reduced funding, work colleges offer creative approaches to make college affordable for all students, particularly those from low-income families, whom they continue to accept at higher rates than other four-year colleges across the country. Work colleges have also institutionalized strategies to develop a highly employable workforce of intellectual citizens, providing their graduates with long-lasting skills and support.

Skills aside, work colleges offer a true sense of belonging to their students, extending into their lives after they leave campus. In part, this is due to the critical role students play as vital members of their institution and community when enrolled, as well as the positive impact they have on their supervisors and colleagues. “As my labor students graduate and move on with their lives, they remain my students,” Peach says. “I write their grad school recommendations, provide references for future jobs and leases, dote over their pregnancies, and buy rice cookers for their wedding showers. They become my work family, in the same way that my other long-term professional colleagues do. I care about them and am rooting for them forever.”

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NOTES

Carnegie Mellon University students face the societal implications of AI

No longer can technologists be alone in interrogating the intended and unintended influences of advancing AI on communities. Our world of ever-increasing technology requires careful contemplation across many disciplines.

Algorithms designed to narrow job applicant pools, network platforms that process data to “read” case law, cars that upload new operating systems overnight, and pocket-size devices that hold troves of vulnerable personal data—these are not potential anomalies of an imagined future. They are already features of everyday life. As artificial intelligence (AI) continues to develop in its sophistication and integration into contemporary society, how well are we preparing students to navigate this reality? What language do we use to describe these systems? How does the public understand or imagine the capabilities of state-of-the-art systems? How do we equip designers to assess and predict the influences and impacts of the systems that they develop?

“The ethics of AI” has become shorthand for several complex and perhaps delicate considerations about the social and cultural implications of advancing technology. Concerns that have largely been the focus of computer scientists, roboticists, and engineers are rapidly moving into mainstream conversations in news outlets, congressional hearings, and our lives. No longer can technologists be alone in interrogating the intended and unintended influences of advancing AI on communities. Our world of ever-increasing technology requires careful contemplation across many disciplines.

Carnegie Mellon University (CMU) is harnessing the expertise of faculty members across campus to create innovative curricular offerings that expose students, regardless of their majors, to many modes of inquiry into the ethical and social ramifications of AI and other technologies. Our emerging efforts introduce students in technical fields, the humanities, and the social sciences to questions that will doubtlessly persist as AI advances in virtually all areas of our economic markets, public governance, and private lives.

In grappling with these questions in specific courses, we consider with our students the ways that AI can, for instance, diminish or exacerbate socioeconomic disparity. We consider how human-to-machine relationships shape and reconfigure human-to-human relationships and negotiations of power, ranging from relationships that involve the most influential brokers of our government and corporations to those that involve individuals who have inequitable access to the internet and digital devices. We also trace technological advancements over time to determine how society has responded to systems like the printing press, the cotton gin, the steam engine, and various other advances that have had considerable impacts on human institutions and relationships. We then look for ways in which these past innovations, and their social and cultural consequences, offer lessons on how we might handle the current technological revolution. As we mine the past and present, we seek indicators of how we can model future interactions between humans and machines and how these interactions might shape our human relationships as individuals, communities, and nations.

An AI major and minor

Technologists like Illah Nourbakhsh at CMU, Alan Winfield at the University of West England–Bristol, and Noel Sharkey at the
When we move away from the novelty of devices and consider their more sinister applications in vulnerable societies, imagining the intended and unintended consequences for advancing AI offers rich modes for analysis in undergraduate classrooms.

University of Sheffield have undertaken research into the ethics of robotics and integrated such work into curricular offerings. Anthropologist Lucy Suchman at Lancaster University has collaborated across disciplinary lines for decades. For example, in “Wishful Mnemonics and Autonomous Killing Machines,” coauthored with Sharkey, Suchman considers US military goals for increasing automated technology in warfare, articulating an urgency for addressing the existential threats associated with humans relinquishing consequential decision making to automated systems.1

But how might that urgency be translated into other object lessons that consider the societal impacts of seemingly more innocuous technologies that also raise questions of human agency and control? How might a humanist attend to or interrogate the potential surveillance capabilities in a system like Amazon’s Alexa, or even the advancing autonomous vehicle systems of Uber, Argo AI, Aurora Innovations, and Tesla? Technologists at these companies can utilize user information to teach systems to optimize safety, routing efficiency, and other features. Alongside technologists’ concerns, an anthropologist, a rhetorician, or a historian might analyze passenger routing data to consider how a company or a local government could monitor the movement of individuals or groups within a population. Within contexts of societies under strife, an in-home device like Alexa, or data on population movement in autonomous vehicles, could allow a government to control a population through surveillance at levels well beyond historic examples. Think about the British military using Alexa as a tool in individual homes in a context like the Troubles in Northern Ireland, or about transportation data being used to monitor black, Indian, and other populations in a political context like the apartheid government in South Africa. When we move away from the novelty of devices and consider their more sinister applications in vulnerable societies, imagining the intended and unintended consequences for advancing AI offers rich modes for analysis in undergraduate classrooms.

As institutions of higher learning help students develop skills to attend to the dynamic issues arising in this era of advancing AI, they can pull in their various experts to develop rich, cross-disciplinary curricula, as we are doing at CMU. Some examples of how our undergraduate curricula respond to and shape circumstances around enhancing technologies include offering

• a major in artificial intelligence in the School of Computer Science that integrates courses on societal impact, modules on ethics, and responsible technological design principles;

• a minor in societal and human impacts of future technologies (SHIFT); and

• the Grand Challenge Seminar: Artificial Intelligence and Humanity (in Dietrich College).

While the AI major focuses primarily on students gaining sophisticated skills to build the next generation of technologies, courses emphasize awareness and sensitivity to the potential implications for systems that do not espouse responsible design practices. Courses meant to develop students’ specific technical skills also include modules on ethical practices. In addition, the program offers stand-alone courses on ethics and technological development.

The SHIFT minor provides a deeper emphasis on complementing technological skill with an understanding of the larger implications of advanced systems. Students majoring in a technical field can, for instance, take classes on the history of science and technology or ethics in philosophy. Students majoring in the social sciences or the humanities, meanwhile, can supplement their studies with a SHIFT minor to build their technical skills. This reflexive curricular design requires a combination of courses that supports students’ content development in their majors and also offers plenty of opportunities to explore AI’s technical elements or its social implications through a robust minor.

A grand challenge
The Grand Challenge seminar AI and Humanity offers an integrated approach to challenges pertaining to AI and society. In Grand Challenge courses, which are held in CMU’s Dietrich College of Humanities and Social Sciences, students interrogate persistent societal problems and concerns such as racism and climate change. Taught by faculty teams, the seminars expose students to the power of multidisciplinary modes of inquiry and collaborative modeling in their
first semester on campus. They set a tone of continual engagement with faculty, peers, and others in the campus community throughout students’ time at CMU.

In AI and Humanity, which I teach with Illah Nourbakhsh in the Robotics Institute in the School of Computer Science, we build a common language with students to analyze various AI and robotics systems. We study narratives in various forms (films, plays, paintings, and television episodes) that explore human interactions with machines, in combination with detailed histories of the technical development of systems ranging from the internet to IBM’s Watson to autonomous vehicles and weapons. We consider how the networking of data facilitates rudimentary and sophisticated modes for surveillance. We also discuss what political contexts allow populations to tolerate or protest against such systems. Our learning outcomes include the following:

- Identify, describe, and respond to historical examples of negotiations of power between human individuals and communities through materials presented in various mediums.
- Develop verbal and written communication skills to diagram, describe, and articulate evaluations of the historical and contemporary evolution of machines and human relationships to these systems.
- Survey a variety of narrative forms that explore human relationships to emerging technologies over time, including futurism.
- Map foundational technology innovations that have resulted in and might lead to disruptive advancements in AI.
- Create individual and/or collaborative narratives pertaining to the evolving relationships between humans and machines.

Throughout the semester, several course themes draw on the history of language as a basis for building a common vocabulary. Students work with the texts *Keywords: A Vocabulary of Culture and Society and Keywords for Today: A 21st Century Vocabulary* to build a shared language and consider the evolution of language. As we move through the semester, we grapple with the following themes:

- Concepts of “artificial” and “nature”
- The early internet and AI systems
As students study developing technologies and narrative imaginings of near and far futures, they are offered the intellectual space to wonder aloud. We watch episodes of the British television series *Black Mirror* that deal with autonomous weaponry, such as “Hated in the Nation,” and with concepts of personhood and sentience, such as “Be Right Back.” We read Karel Čapek’s science fiction play *R.U.R.* (*Rossum’s Universal Robots*) and compare it to Jordan Harrison’s play *Marjorie Prime* as we consider the power of narrative, the portrayal of humanoid robotic systems, and the manner in which these plays contend with human-to-human negotiations of power and conceptions of personhood. We analyze these plays in the context of the *Narrative of the Life of Frederick Douglass, an American Slave*, in which concepts of property, personhood, and citizenship are discussed in a historical framework. We also consider the plays alongside contemporary stunts like Saudi Arabia’s granting citizenship to the female humanoid robot “Sophie.”

Guest speakers visit the course, examining issues ranging from responsible design to the potential implications for autonomous weaponry regulation. Recent speakers include Lancaster’s Suchman; John Havens (IEEE, a technical professional organization); Mark Kamlet (CMU economist); David Danks (CMU philosopher and ethicist); and Louis Chude-Sokei (Boston University literary critic). We also hold public events, such as Public Engagement with AI & Robotics through the Arts in Pittsburgh, at which we hosted the creative director for the Pittsburgh Public Theater; the head curator for photography at the Carnegie Museum of Art; the director of new plays at City Theatre; and a professor of architecture who uses robotic systems to experiment with artisanal plastering techniques.

In addition to guest speakers, the class also visits research sites. We have toured the Community Robotics, Education and Technology Empowerment (CREATE) Lab and other robotics labs at CMU. Tours of local corporations include Argo AI, Aurora Innovations, and Uber. These tours allow students to see state-of-the-art technology and interact with engineers and technologists in both academe and industry to discuss the issues and ideas with which students engage throughout the term.

**A curricular trajectory**

In July 2019, we piloted a guided-research course to build on themes from the first-year seminar. For the research course, a group of four students developed the focus of our shared work: the influence of technology on education. The work took shape around a discussion of an article in *Science Robotics*, “Social Robots for Education: A Review.” As we shared initial reactions to the reading, a rising second-year student in the School of Computer Science raised questions about how a child’s developmental sense of agency can be altered by interacting with embodied systems through social robots in contrast to virtual tutor systems on...
a computer interface. The student cited the definition of agency—an ability to act and exact change—and questioned how it might be understood as a feature of a system, which is distinct, of course, from considerations of a child’s sense of agency. This opened up a theoretical and semantic interrogation of what agency means, as a keyword, in children and in a child’s interaction with the examples of social educational tools described in the article, which are modeled after a tutor’s role in a classroom.

Our student’s sensitivity to language and the concerns associated with power negotiations that manifest in K–12 classrooms were an exciting extension from the first-year seminar. The group’s attention to language, the history of technological advancement over time, and technology’s intended and unintended consequences was part of an impressive development trajectory as students moved from consumers of ideas presented in the first-year seminar to leading our discussion and choosing their project themes in the research course. The students’ guided research project suggested the poignancy of a dynamic cross-disciplinary approach to curricular development and its translation to curricular design well beyond introductory-level classes.

The only way to successfully tackle the challenges of AI, as well as a range of other societal concerns—from climate change to racism to political rhetoric and democracy—is through cross-disciplinary inquiry and collaboration. While there is considerable work ahead to equip our graduates with the tools necessary to navigate and lead in the rapidly changing world, we believe an interdisciplinary approach, throughout a curriculum or in a single course, offers the necessary tools to attend to these challenges and the changes already underway.

NOTES

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We had been out all morning on a campus development tour through Yangon, Myanmar, and had turned down a $10 million offer to fund the entire launch of Parami University. Afterward, Kyaw Moe Tun, a Yangon native and recently minted Yale PhD, and I, a young Asian studies professor at Centre College at the time, sat down to debrief with Kyaw Moe Tun’s family over lunch.

Someone cleared a throat at the other end of the table. Someone else let a spoon clumsily bounce off the lip of a bowl full of chicken curry. They couldn’t believe that we had walked away from what sounded like a dream offer.

“The problem was that the potential funders we had met with would not have supported our plans for an institution that fostered critical thinking, global engagement, civic values, or creativity among its students. Instead, they expected our institute to operate as a for-profit business with little interest in promoting quality instruction and holistic education. The charge would have been to create certification schemas and market them for an immediate return on investment.”

“We can’t nurture liberal education here if we have to take orders from investors from day one,” Kyaw Moe Tun told his family. “We need quality, international-standard education, not more degree factories. The investors said we had to be a for-profit institution, or no deal—so, it was no deal.”

Kyaw Moe Tun’s mother, a savvy Yangon businesswoman, shook her head. “I don’t understand,” she said. “Why didn’t you just stay in the United States and become a successful chemist?”

Other young professionals have faced similar questions as they return to Myanmar to help rebuild their communities. In recent years, Myanmar has emerged from a military dictatorship and taken important steps toward greater democratization. The new ruling party, the National League for Democracy (NLD), and its de facto head, State Counselor Aung San Suu Kyi, are proponents of educational reform and are slowly refurbishing dilapidated campuses, supporting new education legislation and strategy, reviving student life, and encouraging collaborations with international institutions.¹

At the same time, however, the tenure of the NLD and Suu Kyi has also been fraught with violations of human rights and civil liberties—including the Rohingya refugee crisis and its attendant United Nations, International Criminal Court, and International Court of Justice investigations—and the imprisonment of journalists.² It is precisely during this troubled period of transition from a military dictatorship to a functioning democracy, though, that Kyaw Moe Tun believes the Parami University of Liberal Arts and Sciences can make its strongest contributions. In offering a liberal approach to higher education, the university promotes critical thinking and understanding of democracy and social justice, which are imperative to addressing global challenges and humanitarian crises, and supporting democratic governance, which includes helping to produce new laws and reforms.³ Indeed, in just three short years, Parami University has become the city’s intellectual hub, hosting ambassadors, global business leaders, and world-renowned economists, and has taken the lead on national private education policy and legislation.

While debates continue over the proper role of liberal education abroad, it is crucial to recognize the profound effect that this type of education can have on young men and women in a fledgling, struggling democracy. We believe that liberal education is a global heritage.
The university also seeks to foster creative, critical thinkers and problem solvers who will help their country meet the demands of its new markets. With Myanmar’s economy now open to foreign investors and visitors, the nation’s government offices, banks, and international corporations are seeking young leaders to manage new systems and create new products. Opportunities for change abound, but the country is facing a shortage of workers with the skills necessary to innovate and govern institutions toward positions of greater equity and profitability.

State-sanctioned plagiarism

Myanmar (also known as Burma) is a nation of approximately 60 million people that borders India, Bangladesh, China, Laos, and Thailand. Known as the rice bowl of Asia, Myanmar was previously home to one of the continent’s premier educational systems. That changed in 1962 when General Ne Win led a coup that abolished the constitution and plummeted the nation into decades of dysfunction and violence. The military dictatorship forcefully suppressed student protests at Yangon University and then continued to dismantle the country’s educational institutions, systematically destroying independent minds among the population. Rote learning and memorization became the staples of the country’s education system, playing into the military’s quest to mold a pliant citizenry.

As a young student studying under military rule, Kyaw Moe Tun memorized his entire biology textbook word for word—without paraphrase. He used to time himself to see how quickly he could recite chapters one through five. Just under forty-five minutes! Exams required students to provide answers as they appeared verbatim in the textbook. Any variation—even in grammar and punctuation—was strictly forbidden and heavily penalized. Kyaw Moe Tun has coined this learning method “nationwide,
state-sanctioned plagiarism,” a heavily policed habit of mind that assures conformity and keeps students far away from innovative, critical thought. It was during medical school that he finally tired of this mindless instruction and decided to transfer to the United States. Through the support of the Pre-Collegiate Program in Yangon, Kyaw Moe Tun was accepted into Bard College at Simon’s Rock in Massachusetts, where he rediscovered his love for learning.

In 2011, General Thein Sein assumed the presidency and ended the dark night of military dictatorship, releasing Suu Kyi from house arrest and reinstating the NLD, which went on to win the 2012 by-elections and 2015 general election. In 2014, after earning his doctorate in chemistry at Yale University, Kyaw Moe Tun made a life-altering choice to return to Yangon, the largest city in Myanmar, to contribute to the rebuilding of the nation’s higher education system. Kyaw Moe Tun and a group of like-minded peers, who had also pursued education in the United States, formed the Parami University Founding Committee. They consulted with similar schools in the region: Ashoka University (India), Fulbright University (Vietnam), and Yale-NUS College (Singapore). These institutions modeled possibilities for success even as they demonstrated the challenges inherent in delivering liberal education in new contexts.

“It was truly inspiring to see what change private individuals could induce in a country with as many socioeconomic and ethnic challenges as Myanmar,” Kyaw Moe Tun says. “I thought, ‘If Ashoka can do it in India, why can’t we do it in Myanmar?’”

The founding committee garnered broad support, grants, and donations from international nongovernmental organizations, local government officials, business professionals, lawmakers, and educators. A deeply Buddhist nation, Myanmar citizens mostly donate to monasteries in order to secure spiritual benefit—civic philanthropy is an alien concept. Despite the growing need for creative workers who can think critically, selling the nation on the benefits of giving citizens a liberal education—with its emphasis on ethnic and religious diversity, interdisciplinary approaches, undergraduate research, close reading and analysis, student engagement, and open discussion and debate—was no simple endeavor. The committee, however, succeeded in raising enough money to launch an institute and continues to meet the challenge of building financial support for expanding its operations.

**Liberal education in Myanmar**

The Paramount Institute of Liberal Arts and Sciences (the precursor to the university) opened in 2016 on the third floor of Shwe Gone Plaza near downtown, with Kyaw Moe Tun as executive director. The institute recently secured land outside the city where it has broken ground on its forthcoming four-year, residential campus. Parami University will be Myanmar’s first private, nonprofit liberal arts and sciences institution. Through Kyaw Moe Tun’s connections, Parami has partnered with the Bard College system to provide graduates with dual degrees—one from Parami and one from Bard College.

The institute currently provides a variety of evening courses that broaden access to liberal arts–style learning and develop critical-thinking skills for both professionals and students. Its core work, however, is the Parami Leadership Program, an intensive one-year residential program offering recent graduates of Myanmar’s state universities a broad-based, English-language curriculum focused on interdisciplinary inquiry, community engagement, global citizenship, critical thinking, and professional communication. The program’s advisory board includes economic and education advisors to the nation’s state counselor, as well as international business and education leaders.

In Myanmar’s public education system, students are tested in nationwide matriculation exams and then placed into different disciplines; students with top scores are fast-tracked into medical universities, while those with low scores are shuffled off to arts and sciences universities. Students then crowd into narrow channels of learning; a student majoring in chemistry cannot take courses in biology or physics. This structural barrier prohibits any possibility for interdisciplinary learning. Accustomed to this system, Parami students initially find it difficult to embrace interdisciplinary learning. But to become future leaders in government, business, the arts, and industries, they must learn to grasp complex issues from all sides and to use the analytical skills necessary to propose multifaceted solutions. The aim is for them to leave Parami better prepared as change agents and citizen leaders for a new democracy.
To help them begin this transition, Parami students first pass through the two-week Writing and Thinking Workshop (a signature program deployed throughout the Bard College system). During the workshop, students unlearn the state-enforced habit of memorization absent inquiry and instead learn to investigate and refine their thought processes through writing. Lessons involving freewriting, focused freewriting, loop writing, process writing, and other exercises help students improve their cognitive and communication skills. The simple act of producing a piece of original writing is revolutionary for these students—they have no text to copy from and no correct answers to reflect back to a vigilant authority. As a result, students become more thoughtful and freer in their expression and more accepting of the ideas and words of nonconforming peers, discovering that designated authority figures aren’t their only teachers. Peers can teach them, too.

“The one important thing I’ve learned at Parami is critical thinking, a crucial need for Myanmar’s young students after experiencing decades of a failed education system,” says Parami graduate Myint Myat Aung Zaw. “I’ve gotten loads of knowledge and experience and also made talented, like-minded friends.”

**New dimensions**

Instructors in the Parami Leadership Program further unravel the indoctrination of state-sanctioned plagiarism by rejecting the role of lecturers and instead acting as facilitators. The institute recruits teachers from abroad who possess backgrounds in liberal education and have excellent English and academic credentials. Myanmar students have been conditioned to expect teachers only to stand in front of the classroom, write on the blackboard, and require them to repeat back written text. Trained by Kyaw Moe Tun, Parami facilitators demand the opposite: students must identify their own interests and motivations and learn to develop their own ideas and arguments, discussing and defending them in an open, communicative environment.

Instructors making themselves available to students is also an essential part of opening up access in the learning space. While teaching the integrated sciences seminar, Kyaw Moe Tun chatted one day with two students after class. They were confused—a bit concerned, in fact—about their life purpose. Their semester at Parami had led them to ask some fundamental questions about themselves that they had never before considered. Discussion and debate surrounding previously unknown concepts—such as the nature of being in philosophy, of life in integrated sciences, of identity in anthropology and sociology, and of competition in economics—caused them to reconsider who they were and what their place in the world might be. The students were analyzing, synthesizing, and evaluating their realities. This is uncharted territory in state education, in which faculty and students keep to the merry-go-round of recitation, memorization, and verbatim recall. Kyaw Moe Tun and the two students ended their chat with no firm conclusions, an outcome that was itself part of their education in accepting the integral, ongoing nature of intellectual inquiry.

The leadership program also teaches students to strictly avoid any form of copying or plagiarism—initially a mind-boggling expectation for students coming from government-run schools or even for-profit, alternative institutions. Students learn what plagiarism is and is not, how to avoid it, and how to properly credit and cite sources. Educators in other countries might see such lessons as a minor judicial matter focused on addressing student laziness or dishonesty. But the stakes are higher for Myanmar students. Learning how to avoid repeating others’ words is fundamental to students’ development as free, critical thinkers and writers. Pervasive state-sanctioned plagiarism blocks the way to a life of greater self-actualization, inquiry, productivity, and leadership.

“Before Parami, when I think and observe a case, there are no new dimensions to consider—it’s just straightforward, one-dimensional,” says Parami graduate Aung Khant Zaw. “After Parami, one of the most important things I’ve learned is to think and observe a case in different dimensions.”

Parami aims to prepare its students to be citizen leaders for a new democracy.
Embracing differences

The Parami Leadership Program’s graduating class of 2018 included students from a variety of ethnic backgrounds: Bamar, Karen, Chin, Mon, Nepali, Ta’ang, Chinese, Indian, Dawei, Lahu, Rakhine, and more. The Parami staff recruits these students onsite in their hometowns across the country. The 2019–20 cohort is made up of thirty-four students, most of whom received full or partial scholarships to attend.

“If I didn’t come here, I wouldn’t know people of my age from different parts of the country like Shan State, Chin State, and Bago,” Parami graduate May Thant Cynn says. “I got to learn their goals, dreams, ambitions, and how they paved their way to work toward their goals.”

In addition, community-campus partnerships and global service learning have become key components of Parami’s curriculum. It is only through working alongside members of diverse communities near and far that students will acquire the proper understanding, empathy, civic knowledge, and intercultural competence to be effective, inclusive leaders. Given Myanmar’s current problems with interethnic conflict, the nation needs young leaders learning early how to work with each other. The effects of the British Empire’s “divide and conquer” policy can still be felt in the ongoing strife between Myanmar’s more than 135 ethnic groups. These open wounds between ethnicities make diversity a difficult goal to pursue.¹

“I was rather uncertain about how realistic I was in creating a safe space for our students who have come from different ethnic backgrounds to openly talk about so many historical and ongoing issues of injustice, discrimination, and domination,” Kyaw Moe Tun says. “I ended up being very surprised—not only are students open to one another’s views, but they also are working to embrace their differences.”

Throughout the leadership program, students conduct research projects that feature community engagement. These projects require students to work with community members to investigate and propose solutions to pressing issues, demonstrating the importance of relationship-building across difference to effect positive change. In state universities in Myanmar, students rarely if ever engage in service learning or conduct original research projects. The Parami Leadership Program is the first place that students engage in either activity. Instructing students on how to conduct their own research projects poses some special challenges. First, proper research methods and skills are conveyed to each student research team. Some of the biggest obstacles they face, though, include resistance from a populace unfamiliar with and even suspicious of researchers, the scarcity of available and reliable research data, and the miles of red tape preventing them from looking into “sensitive” topics (for example, journalism, nationalism, religion, natural resource allocation, and ethnic conflict).

A recent student project entailed producing a board game involving “fake news” in Myanmar, a serious issue in a nation for which Facebook is a main news source.² The game was developed in partnership with the publishing company Mote Oo Education and is being piloted with youth in Yangon. Another project involved the problem of plastic and waste management in Yangon, where every day more than three hundred metric tons of rubbish are improperly handled.³ The students made a video documenting the production of trash in the city, featuring interviews with workers and local residents.⁴ Yet another project involved the adaptation of solar panels for use on small rural farms. Students traveled to Hlegu township, northeast of the city, to work with farmers on setting up electricity-generating systems on the farms.

Halfway through the Parami Leadership Program, all students and faculty participate in an off-campus service-learning project, traveling hundreds of miles to the north to the rural village of Sin-le in Shan State, an area ethnically and historically distinct from south-central Myanmar. Divided into groups, the students live with residents and integrate themselves into village life. For some students, this involves teaching in local schools; for others, it means working in the fields. Some students take on more prominent leadership roles, helping villagers to organize and conduct public ceremonies.

Every evening before the sun sets, faculty and students gather to share and reflect upon their experiences through poetry and prose. Touched by the care, responsibility, and sincerity of the reflective pieces, Kyaw Moe Tun finds this to be one of the most rewarding moments of the program.

“I have learned that all students have different perspectives from different backgrounds and different purposes for studying at Parami Institute,”

The simple act of producing a piece of original writing is revolutionary for these students—they have no text to copy from and no correct answers to reflect back to a vigilant authority.
says Parami graduate Thaung Ablay Mee. “But one thing in common is that everyone came to Parami to learn from each other and go back to their community as change agents.”

**Power for good**

Four years after the 2015 elections, the adequate funds, teacher training, and political will to implement necessary changes in public education are still extremely limited. In the meantime, Parami, as a private nonprofit, is meeting the needs of students and industry and providing the personnel, the educational models, and the administrative and faculty training that public-sector education will need as it modernizes its facilities, materials, pedagogies, and curricula.

In August 2019, Kyaw Moe Tun facilitated the creation of Myanmar’s first Private Higher Education Institutions Association. Attendees included the Minister of Education, the chair of the National Education Policy Commission, and representatives of the National Accreditation and Quality Assurance Committee. Such an event would have been inconceivable only a few years ago, when education was still squarely a state matter under the thumb of the military. The organization is now positioned to work with the appropriate ministers and legislators to recommend law and policy for the private education sector.

While debates continue over the proper role of liberal education abroad, it is crucial to recognize the profound effect that this type of education can have on young men and women in a fledgling, struggling democracy. We believe that liberal education is a global heritage. Broad-based, interdisciplinary curricula emphasizing student engagement may be commonplace in the United States, but they are rare gems in a nation still riven by interethnic and interreligious conflict. A liberal education offers young Myanmar change agents the opportunities for growth that they need to help their nation legislate, reform, heal from decades of civil war, and manage the flood of international interest in their country’s natural resources and markets. The environment is not always hospitable to critical thinking, free expression, and inclusive problem solving, but it is precisely in these troubled contexts that we expect to witness the immense power of liberal education. [8]

**NOTES**

After a recent men’s water polo practice at Brown University, a member of the team approached the coach with a question. Was that his physics professor he’d seen in the bleachers observing the team as they worked out? The coach explained that the professor had attended the practice as part of the university’s faculty–athletic coaches group, a learning community that aims to bring together academics and athletics in common service of the liberal arts educational mission.

“In the classroom, my team member typically hides his identity as an athlete because he worries he will not be taken seriously as a student,” the coach says. But seeing his physics professor at practice, the athlete told his coach, made him feel “whole.”

The academic and athletic missions of colleges and universities are often portrayed in opposition. One illustration of this tension is the recent “Varsity Blues” admissions scandal, in which illicit athletic recruiting subverted equitable admissions processes. Other less newsworthy examples of tensions around collegiate athletics include student-athletes’ need to miss classes or exams for games, as well as some faculty perceptions about athletic “cliques” in majors or courses (when members of the same team, for instance, sit together in a class). But are the athletic and academic missions of colleges and universities really so antithetical?

For the past two years, we have convened a faculty–athletic coach learning community at Brown University that recognizes the complementary role that many athletic coaches and faculty members play. One of us, Kerrissa Heffernan, after serving as a women’s rugby coach and faculty member in education at Brown, spent three years as director of engaged sport at the university’s Swearer Center for Public Service. The other of us, Mary Wright, is the director of Brown’s Sheridan Center for Teaching and Learning. Through our work with the learning community, we have uncovered more similarities than differences in teaching and coaching contexts. For example, educators and coaches both consider such questions as: How can students practice key skills before high-stakes performance tests? What are effective ways to motivate diverse students to do their best? What are approaches to cultivating inclusive communities? Further, although athletics is often thought of as an extracurricular activity, our observations and discussions suggest that, like faculty members, coaches are often engaged in teaching key liberal arts competencies such as problem solving, writing, persuasive communication, and critical thinking.

**A faculty-coach learning community**

Over coffee one day, the two of us found ourselves discussing how the idea of “practice” is common to athletics and the science of learning. This seemed particularly pertinent at Brown, which offers the nation’s second-largest collegiate athletics program, with thirty-eight varsity sports and approximately eighty-seven coaches. Twenty-seven percent of undergraduates at Brown participate in varsity or club sports. Our initial conversation led us, in the fall of 2017, to formally ask selected faculty and coaches...
to participate in a learning community that would involve a yearlong series of discussions about teaching and coaching. In an effort to create engaging and deep conversations, we tapped our connections in the Brown community to help us identify faculty who played sports in college and also to identify head coaches with a reputation for being good teachers. The inaugural group included nine faculty from all ranks—from full professors of physics and history to senior lecturers in engineering and nonfiction writing—and seven coaches from both revenue sports (men’s baseball, for example) and non-revenue sports (women’s rugby, for example). In its second year, the group grew to ten faculty, nine coaches, an alumnus who competed in two Paralympics, and a student who competed in two Olympics. Nine members of the 2017–18 community stayed on through 2018–19, meeting monthly. The group plans to continue to meet with joint faculty-coach leadership.

Beyond grappling with the role of athletics in Brown’s teaching and learning agenda, we aimed to explore the similarities and differences between coaching and teaching in order to develop connections between faculty and coaches. We structured the initial conversation around personal narratives, with different prompts for faculty and coaches, to uncover areas of alignment. For instance, we asked coaches, “Thinking back to when you were a student, what is one thing that a faculty member did that really helped motivate you to perform at your best?” For faculty, we asked, “Thinking...
back to when you were on a team, what is one thing that a coach did that really helped you learn?” In these discussions, both faculty and coaches noted times when they were injured or struggling and a trainer, dean, or instructor helped pull them through by reminding them of their academic identity. Other common themes that emerged included the value of an instructor or coach getting to know a student-athlete “as a person” to help him or her achieve high expectations.

All learning community participants read James M. Lang’s Small Teaching, which contains chapters such as “Practicing” and “Motivating” that are applicable to both coaching and classroom contexts. Throughout the year, the large-group discussions focused on a variety of questions:

- What does it mean to be a “good coach”? A “good teacher”?
- What is the teaching/learning contract with the athlete/student? What is most difficult or misunderstood about these relationships?
- How do you motivate students? How do you assess improvement?
- The idea of “practice” is central to an athletic team. Why do we practice? How might practice be important in the classroom?

To anchor these discussions, we asked faculty members to observe coaches conducting practice sessions with athletes. In turn, coaches sat in on classes as faculty worked with students. The observational sessions allowed participants to view students’ experiences in different learning environments, as well as to see various approaches to teaching and supporting students. At our regular meetings, we held debriefings about the visits using the appreciative prompt, “What elements of your partner’s use of practice [in the classroom or for a game] make it effective?” Faculty members tended to be interested in how coaches motivated athletes to push beyond their limitations to excel. Many faculty members were surprised by the close relationships coaches had with their athletes—relationships often developed over four years and involving nearly daily interaction—which coaches could use to motivate students. Coaches were interested in how faculty motivated learners, even without these close relationships, and created engaging learning environments for diverse groups of students. The coaches were often puzzled by the obstacles faculty encountered in building relationships with students, due to factors such as workload, classroom space, and logistics.

There was a shared interest in how both coaches and faculty members exercised professional judgment—how they assessed a student’s capacity to master content and apply learning in high-stress situations. As Kate Kovenock, head women’s swim coach at Brown, explained to us, while swim times are important in evaluating her athletes’ potential, they are merely a starting point. When recruiting, she observes things like swimmers’ “feel for the water,” their hand placement in the stroke cycle, the fluidity of their kick, how they position themselves, and whether they fight the water or understand how to use the water to move efficiently. She also evaluates how open they are to feedback. “These things are the hardest to teach but tell me the most about their potential to be successful,” she says.

Similarly, James Valles, a professor of physics at Brown, sets out to better understand his students’ “innate ability in physics” by asking questions to ignite their curiosity and listening to how they respond. He also watches how they approach problems. When they do not know where to start in solving the problem, some students will talk to other students, taking a social risk. Others might employ the wrong equation but play it out to a reasonable solution or solve the problem with a mathematical leap. Some students might work backward to reverse engineer the problem. “However they arrive at the answer, it’s that moment of clarity after a leap that is so satisfying,” he says. “Much of physics is about getting students into spaces where they make those leaps and trust their knowledge of how the laws, principles, and the math can guide them.”

Valles points to his students’ academic accomplishments before arriving at Brown.

Common themes that emerged included the value of an instructor or coach getting to know a student-athlete “as a person” to help him or her achieve high expectations.
“The students in my intro class were high school valedictorians, scored in the top percentile of the SAT, took multiple AP courses. They’ve always been the smartest kid in the class, and now they find themselves struggling to keep up.” Lang’s chapter on “Growing,” which highlights attributes of failure and growth mind-sets, enhanced the group’s discussions about the challenges of unlocking students’ potential at the collegiate level.

Despite the many similarities, faculty and coaches also identified significant differences in their work with students. Coaching is a very public, high-stakes activity. Success and failure are on display every week when a team wins and loses, and the activity of coaching can be viewed by anyone attending the game. In contrast, teaching is relatively private, and success and failure are less explicit and publicized. In addition, faculty cannot choose the students they teach and often have little knowledge about who will be sitting in their classrooms. Coaches, on the other hand, recruit athletes and tend to have a great deal of knowledge about them.

BUILD YOUR OWN FACULTY-COACH COMMUNITY

Two strategies helped make the faculty-coach learning community so successful at Brown University. First, it is critical to curate the community, bringing people together in a spirit of appreciative inquiry. One attempt at forming a group, tried years earlier, used a more open call to discuss the relationships between athletics and academics and resulted in tense, unproductive discussions.

For the community we ultimately created, one of us—Kerrissa Heffernan, former director of engaged sport at Brown’s Swearer Center for Public Service—contacted each of the participants in advance. This initial conversation framed the expectations of the group and made clear that the community would not be the place to argue about when the bus leaves or why a student cannot be excused from class. Rather, the focus of the group is about the practices of coaching and teaching and their relationships to the educational mission of the university or college.

Second, it is important to consider who will lead the group and where it will meet. In this case, Kerrissa, as a former coach at Brown, has extensive ties to current coaches at the university. The other one of us, Mary Wright, as the director of Brown’s Sheridan Center for Teaching and Learning, has strong ties to faculty members. Coaches appreciate that our group meets in the teaching and learning center space, which signals credibility for the participants’ perspectives.

We also invite readers to think more broadly to elevate the role of athletics and coaches in the academic mission of the university. At many universities, a common practice is to invite faculty and their family to games. Although this promotes faculty member engagement in the lives of their students, it still posits athletics as extracurricular entertainment. Instead, we recommend activities that promote colleagueship between faculty members and coaches. Another example of promoting colleagueship is including athletic practices in “open classroom weeks” designed to make teaching public. We also include coaches as facilitators and participants in Center for Teaching and Learning events. Through these small steps, faculty and coaches will be able to see more of their commonalities as teachers and mentors and understand that they are all on the same team.—Kerrissa Heffernan and Mary C. Wright
Supporting the liberal arts mission
To underscore how athletics can complement the academic mission, at one of our meetings, we asked participants to reflect on the question “How do you have students/players practice for key liberal arts competencies (such as problem solving, writing, and critical reading)?” Even though participants did not put their names on their written responses, the exercise demonstrated that both groups were encouraging student development of these skills. Examples included:

**Writing**: Players write a “letter to the sport of basketball,” noting their emotional connections to the sport over time. In academic courses, students write peer reviews, take essay exams, and write analytical essays.

**Problem solving**: Players are repeatedly asked to drill but under different constraints, introducing slightly different cases to teach analytical thinking. For instance, if the opposing team does one type of play, what should the player do? Now, if they do another type of play, what is the next response? Repeated, progressive problem solving develops facility in recognizing a challenge and pulling upon a repertoire of solutions, analogous to the use of case studies in the classroom or clinic.

**Data science**: Athletes learn statistical analysis through processes such as scouting and recruiting. In courses, students are taught data science through projects and problem sets.

**Persuasive communication**: Players engage in strategic team meetings, pregame motivation, and half-time assessments. Team members must clearly communicate with each other, and effective captains learn motivational communication to spur peak performance. In turn, faculty members frequently ask students to work in small groups for discussion or project-based work, while some also assign classroom presentations.

Positive outcomes
For the two years that we have been facilitating this learning community, we have seen a number of positive outcomes. In a post-participation survey, a majority of coaches and faculty members strongly agreed that the program helped them gain a greater understanding of the work of teaching and coaching.

In responding to the question, “What might you change as a result of participation in this learning community?” faculty said that they planned to work to form deeper relationships with students and be more deliberate and transparent with them. In seeing the ways coaches involve assistant coaches in planning, faculty reported that they wanted to consider more collaborative lesson plans. They also aimed to explore more “low stakes” testing, such as quizzes, and provide more opportunities to “practice” as a route to mastery. And faculty members said they wanted to build a team dynamic in the classroom, incorporate more active-learning exercises, and work to meet students “where they’re at.”

Coaches said that they came away from the community with the goals of being more flexible in their practice plans and focusing more on long-term growth by building athletes’ confidence in different tasks. They also aimed to become more reflective in the way they coached, adapt practice plans to consider athletes as individuals, incorporate a variety of teaching styles to address different learning preferences, and be better attuned to the way they communicated with their athletes.

Bridging the divide
The tension between faculty and coaches often reflects a lack of understanding each has about what the other does in day-to-day work. Teaching and coaching are different activities and hold different values in the university. The faculty-coach community revealed that it may be more accurate to describe coaching and teaching as a continuum: many faculty members are good coaches, and many coaches are good teachers. Disseminating, developing, refining, contextualizing, and building cultures of teaching in both the classroom and athletic realms demand particular interpersonal skills that may not be contained in the title “coach” or “professor.”

The participants in our community all agreed that bringing coaches and faculty members together in ongoing, respectful conversation can bridge the divide between athletics and academics and leverage the learning that happens in these environments to build a stronger liberal learning experience.

NOTE
Leadership Lessons

Perspectives on a twenty-five-year presidency

In 2020, I will be retiring as the president of Bay Path University after twenty-five years. My career in higher education, however, began long before and has spanned more than four decades. As I prepare to move on to the next chapter of my life, Christen Aragoni, the editor of *Liberal Education*, has asked me to reflect on the Bay Path journey and share my optimism about the challenges higher education faces today. How did Bay Path, a women’s university, thrive and become one of the fastest-growing private baccalaureate and then master’s institutions in the United States, with enrollment increasing from just 450 to more than 3,400 students? What are the essential ingredients of a successful presidency? What insights might I offer other leaders at small, private, independent institutions as they navigate the ever-changing higher education industry? Here, in brief, are five lessons that have shaped my presidency, transformed Bay Path, and positioned the university for a financially stable future.

**First, the back story**

Founded in 1897 as a coeducational business school, Bay Path became all-women after World War II, in time finding its niche as a junior college. Six years before my arrival as president, the Commonwealth of Massachusetts had given Bay Path College the authority to grant baccalaureate degrees. Although history, strong presidential leadership, and a balance sheet with very little deferred maintenance were on the college’s side, for some time it had been struggling to attract young women to a single-sex education. When I began my tenure, the numbers were grim: the entire student body numbered fewer than 450.

You may ask what compelled me to take the position. The answer was simple: I saw tremendous potential at Bay Path. I believed in its mission of a practical, career-focused education built on a liberal arts foundation that would allow our women, often from working-class families, to have an independent and fulfilling life. Long before the debate of the pros and cons of a career-focused education, Bay Path knew that its core strength was preparing graduates for careers that offered excellent growth potential and that mattered to the economic landscape of our region. Over the decades, we have been resolute in strengthening that mission, especially for women. This continues to be among the most important factors in decision making and program development at Bay Path.

So, with a mind-set that fully embraced the educational philosophy of Bay Path’s founding, and with a heart that fully embraced its mission, I accepted the presidency, determined to lead Bay Path into the future. It was, I knew, a matter of survival.

**Lesson 1: The big differentiator**

Bay Path’s upward trajectory over the past twenty-five years has been driven, in large part, by our steadfast commitment to remaining a women’s college. This has not always been an easy course to maintain, especially during economic downturns, when the prospect of becoming a coed institution might have seemed to hold merit. Yet we have not wavered. Our belief in women’s education, grounded in Bay Path’s mission, differentiates us from most other colleges and universities and is

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fundamental to defining who we are and what we do—supporting the advancement of women at all ages and stages.

With time, the definition of “women at all ages and stages” has evolved. Today’s Bay Path students reflect the changing demographics of America. Our undergraduate student body is a complex and beautiful mosaic of diverse, first-generation, and underserved women ranging in age from eighteen to seventy. Mindful of the unique needs of the students we serve, and confident in what we have learned in helping them succeed, we tailor programs to drive retention and persistence to graduation. For example, our Women as Empowered Learners and Leaders (WELL) program is built into the curriculum and woven throughout the undergraduate experience, ensuring that the academic component is enhanced by a journey of self-discovery as reflected in ePortfolios, community service projects, and tailored events that highlight our annual campus theme. WELL sets us apart from other institutions and helps define us for our most important audience: the women we educate.

Further differentiating Bay Path in the marketplace is our advocacy for women’s leadership both within the university and throughout the community. Our Women’s Leadership Conference, which attracts more than two thousand attendees annually and is now entering its twenty-fifth year, has brought incredible speakers like writer and activist Maya Angelou, broadcast journalist Barbara Walters, and former secretary of state Madeleine Albright to our region. The conference allows us to showcase Bay Path’s core competencies: our ability to develop and deliver unique educational experiences, our promotion of networking opportunities, and our willingness to tackle the issues facing women today, while also providing partnership opportunities among conference participants, the university, and our students.

My advice: Fully leverage what differentiates you in the marketplace and what’s important to your audience. Always stay true to your mission.

Lesson 2: Never stop changing.
Early in my tenure, as we began to rattle the status quo, a frequent question I heard on campus was “Can we stop changing now?”

In reality, we had been evolving since our founding in 1897, but true seismic change at Bay Path began in 1999, when, with great determination, we set out to develop an entirely new model of education to meet the needs of adult women. There were so few options available for these women, many of whom worked full-time and managed families while struggling to take college courses at night (a scenario that is still all too common across America). It often took them years—as much as a decade—to earn a degree, if they were even able to complete their education. We knew we could change that. We also knew it wouldn’t be easy. But we plowed forward, launching the One Day a Week Saturday Program for adult women, offering women the chance to earn their degree in as little as a year and a half to three years by attending classes all day on Saturdays in a six-week accelerated format, eleven months a year. No other college or university was offering this type of educational model.

Forging ahead with a new model demanded change in nearly every area of the institution. We had to re-engineer how we delivered all student services, from financial aid and registration to advising and even parking! The academic calendar was revamped. Faculty members, who agreed to work on Saturdays teaching classes in five-hour blocks, had to refine pedagogy to fit the learning styles of adult women, incorporating interactive learning, immersive discussions, and inclusion of life experiences.

It wasn’t easy. Change rarely is. But it was hugely successful.

The One Day a Week Saturday Program gave us great insight into what adult women need to flourish, such as flexibility, accelerated courses, peer support, and acknowledgment of and responsiveness to the unique life challenges faced by adult women, many of whom were single mothers working full-time. It also provided the financial resources that allowed us to grow our undergraduate programming and enrollment, as well as fuel the next phase of our evolution: graduate programs. But perhaps of even greater significance, the change process infused an entrepreneurial mind-set at Bay Path that continues to define our culture and operations. It also informs our approach to human resources. We understand that the Bay Path ethos of constant change and innovation isn’t for everyone, so we make very intentional hiring decisions. I often look outside of the higher education
industry to find talent that will bring new perspectives to our institution, and I have been especially fortunate to count on a consistent and talented executive staff to help lead Bay Path through risk as well as opportunity.

In his book *Good to Great*, business management consultant Jim Collins points out, “If you have the right people on the bus, the problem of how to motivate and manage people largely goes away.” To this day, I am part of the interview process for full-time faculty and staff candidates, during which I share the history and culture of Bay Path and make sure the candidates understand the fast pace at which we operate, how we must continue to stay ahead of the industry and technological changes, and that we must always remain student-centric in all we do. I like to remind our new hires that the one thing that will remain the same is that we will always be changing in order to best serve our students.

No, I respond to all who ask, we cannot stop changing now.

My advice: Among the most important questions to ask is “What can we be doing differently—and better—than what we are currently doing, than what our competition is doing, and that really matters to our students?” Then hire the faculty and staff members willing to join you in forging ahead to create a new vision.

**Lesson 3: You must decide to decide.**

We have always operated under a vision and financial plan at Bay Path, developed every three years and endorsed by our board of trustees. And while plans are critical, they must also have the elasticity necessary to respond to major and unanticipated challenges—the Great Recession, for example—as well as to opportunities, such as the one we seized with the development of our master’s in physician assistant studies. Plans, such as structures, policies, and processes, play an important role but cannot be allowed to strangle the institution’s ability to evolve. The acceleration of change, as we have experienced at Bay Path, demands nimbleness and swift decision making.

This also pertains to how we bring new programs to the marketplace. We have been in a growth mode—some might refer to it as a dizzying growth mode—for twenty years, and we have no plans to slow down. In any given year at Bay Path, we develop and launch, on average, two to four new academic programs, with a particular emphasis on new and niche degrees in on-the-ground, online, and hybrid formats. We are also (1) implementing new technologies across the university, like customized customer relationship management technology, to better serve students and increase the effectiveness and efficiency of our processes; (2) harnessing data in new ways, including predictive analytics; and (3) retooling our approach to student services to provide online support. And we are doing all of this as we implement major grants, both private and federal, including a Strada Education Network award for $1.5 million to develop a digitally fluent workforce, the 2019 award of our second Title III grant for $2.25 million, and multiple National Science Foundation awards, all of which help fuel the engine of our success.

But there is a balancing act to all of this. While decision making and program implementation at Bay Path is rapid by industry standards, thorough due diligence and scrutiny of required resources, including financial and human, are fundamental tenets to the way we do business. We voraciously consume data and assess the external landscape to stay on top of industry and workforce trends. Our strategic investments, aligned with multiyear vision plans, are based on comprehensive feasibility studies. Corresponding financial models are realistic and conservative.

Judicious fiscal management is central to Bay Path’s decision making. Bay Path is a no-frills institution, frugal in our approach to expenses. While we rely almost entirely on tuition dollars for revenue, we have little to no deferred maintenance. Our capital investments have largely involved technology or renovations to existing facilities. To be sure, challenging economic times have demanded that we make difficult,
sometimes painful choices, such as freezing salaries and delaying hiring for positions, but the litmus test for any decision has always been our mission. Diminishment of the academic enterprise or the student experience is not an option.

Aside from considering the fiscal and human implications of any agenda for change, leaders must also encourage—demand, even—that decisions not be turf-bound. For example, we have streamlined the process of new degree approval, enabling us to bring programs to market more efficiently and more quickly. As Bay Path’s enrollment and programming have grown, I have been careful to prevent layers of bureaucracy that could become a burden on the institution and a barrier to students. I believe this is the Achilles’s heel of higher education. Bureaucracy not only hinders the fostering of new ideas but also has an innate tendency to preserve the status quo and stall progress.

Equally important to how we make decisions in furthering the institution is the engagement of our board of trustees. I cannot stress enough how important it is to Bay Path that our board has an appetite for risk and a willingness to challenge the higher education “norm.” Our trustees are willing to roll up their sleeves and grapple with critical issues facing our industry, such as diversity and inclusion, the cost of college, persistence to graduation, online learning, and credentials that transcend degrees. Board members not only approve our vision plans; they actively support them.

But despite all the planning, research, and debate; the engagement of stakeholders; and the support of the board, at the end of the day, as president, I must own the decisions we make. And I do.

My advice: Be very clear about your decision making. What are the values and the criteria against which you, and your faculty, staff, and board, evaluate decisions and move forward with plans? Also assess what gets in the way of sound decision making, including preservation of historically claimed notions about your institution and the higher education industry.

Lesson 4: Mind-set for innovation and growth

Our ability to predict, listen, and act quickly has contributed much to the success of Bay Path’s programs. The big differentiator, as conveyed in Lesson 1, is our mission of educating and advancing women. Aligned with this is our commitment to providing career-focused education and to preparing students for the workplace. Our approach is to develop niche degrees, including graduate degrees, for in-demand professions. This phase of our evolution, started in 2000, has had an extraordinary impact on Bay Path. Graduate programs—many of which are online—now account for 44 percent of our total student population and generate 55 percent of net tuition and fee revenue.

Bay Path’s graduate programs build on the strengths of our undergraduate degrees, most notably in the fields of technology and health sciences. We launched our first graduate degree in 2000, a master of science (MS) in communications and information management, followed soon after by a master of occupational therapy (MOT). We have continued to launch new programs in response to economic needs, and growth has been extraordinary.

On the technology side, our graduate programs have expanded to include MS degrees in cybersecurity management and applied data science, among others. As with the health sciences programs, the technology degrees are increasingly earning not only regional but national recognition for providing education that is relevant, critical, and immediately applicable to the changing workplace. Accordingly, enrollment is not only growing from the pipeline of current Bay Path undergraduates but from the employees of organizations seeking to stay ahead and succeed in the marketplace.

Success in our MOT program led to the launch of an MS in physician assistant studies and the construction of our first new academic building in more than forty years, the 58,000-square-foot Philip H. Ryan Health Science Center. We have since launched other cutting-edge graduate degrees, including an MS in genetic counseling, the first online program of its kind in the country, as well as our first doctoral programs.

As we consider the development of new programs, we assess the skills and jobs that are in high demand. We also look at who else might be offering a program, considering not only traditional competition but also other providers of education—and there are increasingly many. In addition to program content, we analyze delivery models—including on-the-ground, online, and hybrid—challenging ourselves to provide options and to make it easier for our students to earn a degree at Bay Path.

Our successful growth has been predicated upon the innovative mind-set of our talented faculty and staff. The launch of our One Day
program, for instance, demanded all members of our community embrace a new approach to their work. In this new model, semesters were condensed into six-week sessions, with faculty teaching five-hour blocks on Saturdays. Some of this was made feasible by our faculty’s willingness to operate within a model that, since 1983, has included a board moratorium on tenure. Today, full-time faculty have three-year contracts. Faculty join Bay Path knowing we do not provide tenure and stay because of their commitment to our mission. Our model also depends significantly upon the engagement of a nationwide pool of adjunct professors who are instrumental to our career-focused curriculum as they bring their industry expertise and experience to our students, a strategy that also enables us to control costs.

My advice: Look to your strengths and build on them while encouraging faculty and staff to develop programs that are unique, both in academic content and in experience, and that address emerging markets.

Lesson 5: Every revolution starts with a great idea.

Experience with our One Day program taught us much about helping adult women overcome the odds and succeed in earning a college degree. We were graduating hundreds of adult women every year, primarily from underserved communities in Massachusetts and Connecticut. But what about the 77 million women across the country without a degree and the promise it holds for a more secure future? We resolved to not leave them behind.

With this bold idea, we set out to create The American Women’s College (TAWC), the first all-women, all-online baccalaureate degree program in the country. With the infusion of a First in the World grant from the Department of Education’s Fund for the Improvement of Postsecondary Education, we developed Social Online Universal Learning (SOUL). SOUL’s data-driven technology is the engine for the online experience, enabling adaptive and responsive learning that integrates artificial intelligence across the platform. Educator coaches, mentors, and online communities of learners all contribute to the effectiveness of the online experience. Our aggressive approach to open educational resources is one of a variety of strategies that make TAWC an accessible, flexible, and low-cost option for students, addressing yet another barrier that too often prevents a woman from earning a degree.

TAWC is succeeding. So are our students. Through interactive support and careful interventions provided by the SOUL system, students are achieving graduation rates that significantly exceed national averages. With degrees in hand, adult women are reporting higher incomes, increased confidence, and a greater likelihood that their children will attend college.

As many leaders in our sector continue to question the value and quality of online education, I have no doubt it is here to stay and will continue to evolve and grow. I predict that it will increasingly be the best or only option for many students, including eighteen- to twenty-two-year-olds, the segment upon which traditional education has been built. This, no doubt, is perceived as a threat to many in the academy. But history teaches us that those organizations, in any industry, that hold on to “traditional” ways of doing business become vulnerable to extinction.

Our conviction that the traditional model and cost of higher education were becoming increasingly untenable led us to rethink and retool virtually every aspect of how we deliver education. Organizational structures cannot be thought of as immovable, and there can be no sacred cows when undertaking change of such magnitude. At Bay Path, we think and act differently, in ways that do not always fit the conventions of higher education and that may not be appreciated or accepted by the academy. But they work for our students.

TAWC is an example of how we need to think outside the parameters of our current educational delivery models and adjust them to a new generation of students. With SOUL, a great idea became the impetus for a great revolution.

My advice: Innovate from within. Encourage risk taking and nurture disruption. Listen to those who challenge the status quo and unleash the creativity that can bring about great ideas.

I am not frightened about the future of higher education.

Although pundits and critics of our industry have become a chorus of naysayers, I am not frightened about the future of higher education in our country. America once led the world in education, and we can do so again. But only if we are willing to acknowledge that our industry must change. We cannot ignore the tsunami of skepticism at our shores, nor can we perpetuate a system that is increasingly untenable from a financial perspective for our students and our own institutions.
What we can do is harness our collective abilities, resources, and visions to—as Michelle Weise, senior vice president and chief innovation officer at the Strada Institute for the Future of Work, admonishes—“seed the foundational elements of a learning ecosystem of the future.”

Integral to this charge is a redefinition of “student.” As futurists have forecast, human lifespans of 150 years are on the immediate horizon. It is not unreasonable to project, then, that careers will span eighty to one hundred years, necessitating an entirely new concept of lifelong learning. How will we, as educators, respond to this demand?

At Bay Path, this is an essential question as we grapple with how best to deliver education in the twenty-first century. Our definition of “student” is bold and encompasses the concept of lifelong learning. It may be an eighteen-year-old studying for her baccalaureate degree as she aspires to her first job; it may be a midcareer professional striving to get ahead in a competitive work environment; or it may be an employee who lacks the skills and credentials necessary for gainful work. This is the new concept of lifelong learning and it is what drove us to establish our Strategic Alliances Division three years ago, a decision that marks yet another chapter in Bay Path’s evolution.

As Weise states, “The future of our nation’s economic prosperity and competitiveness will depend on a citizenry that regularly retools itself for the future of work.” The mandates upon us, as institutions of learning, are (1) to build healthy ecosystems of partnerships with other colleges and universities, as well as businesses and organizations; (2) to adopt new learning models that will meet our students where they are in their lives while addressing affordability; (3) to explore how technology and the management of data, including the use of artificial intelligence, will enhance the student experience and influence how we do business; and, most important, (4) to shift our thinking from finite endings such as bachelor’s and master’s degrees to credentials, certificates, and learning opportunities that provide a continuum of academic enrichment over a person’s lifetime.

There are so many possibilities for the future of higher education. All it takes is courage.
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