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SPECIAL EDITION | SUMMER 2017 The Disruptors 2 Steves. 1 Vision.

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PHILADELPHIA UNIVERSITY + THOMAS JEFFERSON UNIVERSITY

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Cover artwork contributed by Edward Sirianno, president and CEO of Creative Communications Associates, on behalf of his daughter and all PhilaU students.



"The new focus of higher education must be learning agility, which includes adaptability, collaboration skills and entrepreneurial outlook."

Heather McGowan Education Strategist and Consultant

SINISTARIED

by Andrea Jarrell

oday, many of the points in Godin's rationale remain problematic: student debt that outpaces wages; students declining to choose the "best" school because more prestige doesn't necessarily equate to more success; and a digital revolution in which universities no longer hold the keys to the world's knowledge.

In a subsequent interview, when Godin was asked to predict what higher education will look like in 2020 he said, "I guess it's fair to say that the business of higher education is going to change as much in the next decade as newspapers did in the prior one."

Now that 2020 is just around the corner, this analogy has become familiar.



Changing the Conversation

The price of tuition has been the thorniest issue in higher ed for years. But today, the most pressing question on students' minds may not be, "How can I afford tuition?" but rather, "Is it even worth it?"

According to the New America Foundation, today's students enroll in college with money and advancement top of mind: to improve employment opportunities (91%); to make more money (90%); and to get a good job (89%). Yet degree completion rates are dismal (50% at many four-year institutions and 80% at many two-year colleges). And student debt has ballooned with direct government lending rising from approximately \$200 billion to more than \$900 billion since 2010. Add to this unprecedented new graduate underemployment and unemployment rates. Students, parents, the media and lawmakers

Working and learning will be an integrated act.

are increasingly skeptical about the current higher education system's ability to deliver individual and societal prosperity.

"The system is broken, and we have to change it," says PhilaU President Stephen Spinelli Jr., Ph.D. While affordability is truly a problem, he sees benefit as the essential part of the equation. "There's no point talking about cost without delivering a robust value proposition."

Driving PhilaU and its plans for the future: How can a college education deliver the most value to students?

To help answer this question, PhilaU engaged pedagogical consultant Heather McGowan, who has worked side by side with Spinelli at the intersection of the future of work and the future of learning. McGowan partners with education and business leaders to help them prepare for rapid and disruptive changes in learning, work and society.

In describing the old higher ed paradigm, McGowan says, "We learned to become educated—an expression that suggests an end state. The process was generally complete in the first third of one's life; that is no longer sufficient. The new focus of higher education must be learning agility, which includes adaptability, collaboration skills and entrepreneurial outlook. It is a mindset that must precede the many skill sets that will be layered and shed over the longer arc of the career."

Learning That Works

How often have you heard that universities are doing anything really different to prepare students for the future? The options that most young people have aren't very different from what was available to their parents' and grandparents' generations.

In the early 2000s, it was provocative for college presidents to talk about the seven or eight jobs their graduates would have over the course of their professional lives. Now that number has doubled. Higher education will be increasingly driven by the changing workplace.

Writing for Forbes Magazine, human resources expert Josh Bersin of Deloitte says, "The essence of the shift is a simple but big idea: The idea of a 'job,' with all its protected artifacts like job title, level and job description, is starting to go away. What is its replacement? People being hired to 'do work,' get a project done, lead a team and be ready to move on as the business needs change."

In preparing students for the real world, colleges and universities must focus on career preparation as a moving target. Current estimates indicate that current graduates will have 16 to 17 jobs across five or more industries. Today, one's first job may last for less time than it took to get a degree.

Colleges and universities that aren't already changing what they teach and the way they teach to prepare students for this new working world will find themselves increasingly irrelevant and under fire.

McGowan explains, "I think the way we currently declare success in higher education is absolutely absurd. We rank a school based upon

Current estimates are graduates today will have 16 to 17 jobs across five or more industries.

how much money they have and spend, how many people they reject (a parlor trick of enrollment and marketing dollars), the throughput of students and the starting salary upon graduation. The cost of the degree is weighted against the starting salary of your first job. That might have

made sense back when your first job was often your last job. But if higher education remains focused on its current formula, it will be preparing students for a fraction of their future at best—if the job functions prepared for even exist upon graduation."

Society needs productive citizens who have learned how to change, while being productive as they change. Are students prepared to change jobs every few years? Are they prepared to create their own jobs? Are they prepared to shape their jobs as they evolve? Are they prepared to solve complicated and complex problems? PhilaU's Spinelli says, "We're trying to make it so everything we offer helps our students answer 'yes!' to these questions."

A Decade's Head Start

Never mind its founding year, for the last decade, PhilaU has been in startup mode. When Spinelli took the helm in 2007, he recognized the need to shake up traditional, outmoded ways of learning. A co-founder of Jiffy Lube International with a Ph.D. in economics from the University of London and a former vice provost of Babson College, Spinelli brought an unconventional, entrepreneurial perspective to PhilaU.

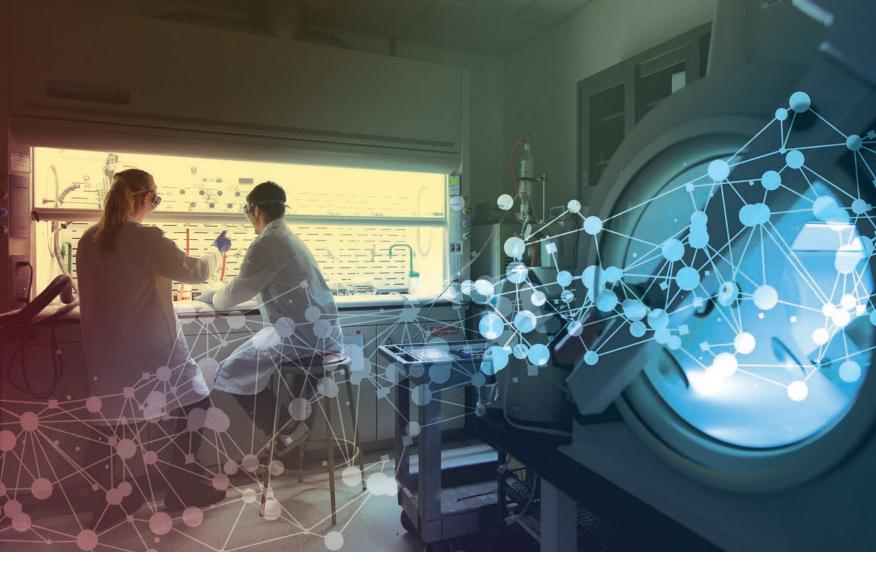
As a university that has always been career-focused, PhilaU set out to "redefine professional education." It started with the question: What does the real world expect of graduates? Spinelli responds, "They expect expansive, collaborative, nimble thinkers. People with vision who seek and create value. They want people who will take responsibility for connecting with and caring for customers, clients and patients. Many colleges and universities talk about these things. We wanted to know what it would look like if these outcomes shaped a new curriculum."

The result was the development of a transdisciplinary approach called Nexus Learning, which PhilaU launched in 2008. It boils down to students and faculty forming teams across different disciplines and engaging with industry partners to help identify and solve real-world problems. Rather than just an internship here and there, these teams work with large companies like Target, government agencies like NASA and smaller startups as part of the PhilaU curriculum. It's now standard for students to have experience creating new products, services and solutions. Spinelli says, "It is one of the reasons our graduates have a 95 percent job and graduate school success rate."

But curriculum alone wasn't enough. The
University needed a place that could leverage the
new program's collaborative, interdisciplinary,
design thinking and no silos approach. That's how
the Kanbar College of Design, Engineering and
Commerce and its DEC building were conceived.
Physically, it's designed to look and feel like the
world in which people actually work—active
learning studios and labs rather than classrooms—
with technology playing a key role.

"Throughout the development of the Kanbar College, industry watched us carefully," says Spinelli. Companies were assessing the program and analyzing its value. "While we have always had industry partners, now they are rushing in. What is really interesting is that we no longer see these outside companies as industry partners but rather as education partners."

The idea of companies being education partners is a sign of a coming educational ecosystem in which traditional boundaries between institutions and employers blur. A 2017 white paper on "Technology, Jobs and the Future of Work," published by McKinsey & Company's Global Institute, suggests companies "evolve education systems and learning for a changed



workplace." The paper advised companies to put a new emphasis on creativity, as well as critical and systems thinking, and foster adaptive and lifelong learning. It suggested that the private sector would benefit from playing a more active role in education and training, providing better learning opportunities themselves and better information to learners about the education and training ecosystem.

As McGowan says, "Working and learning will be an integrated act. We used to learn how to make something or learn how to use a tool—from hand tools to computer technology. We will now learn from and with our tools and through our processes of making. This fundamental shift will reframe our structures of work and our systems of education."

"What is really interesting is that we no longer see these outside companies as industry partners but rather as education partners."

Stephen Spinelli Jr., Ph.D.

Philadelphia University President

Powered to Do What's Next

Over the last decade some have asked: "Who is PhilaU to take on defining professional education for the 21st century?" But as the University prepares to combine with Jefferson, its boldness has paid off. "We've proven PhilaU as the beta test that can change a lot," says Spinelli.

As a small university, PhilaU prides itself on a unique intersection of expertise—health and science, engineering, design, architecture, liberal arts, social sciences and business.

Its marketing materials boast, "No other school weaves these areas together on the scale that we do to develop desirable, feasible, valuable ideas, and the thinkers and doers behind them. It's why we say our graduates are powered to do what's now and what's next."

A unique intersection of expertise on a much greater scale is what makes the union with Jefferson potentially groundbreaking.

"Uniting our two universities is about starting a revolution in education," says Stephen K. Klasko, MD, MBA, President and CEO of Thomas Jefferson University and Jefferson Health. "It's about what's next for academics and for the careers and outcomes that our students will pursue when they graduate. As one example, this new university will bring PhilaU's programs in design to the students of Jefferson at a time when one of the fastest growing areas of healthcare is design and wearables. We're going to find incredible synergies like that across the board because the breadth and depth of programs at PhilaU are so strong. Together, we can enhance the value of education for students—whether in design, engineering, fashion, architecture, business, science or healthcare—so that they can add more value to our world."

In the PhilaU-Jefferson union, McGowan and others view the potential to build out new offerings from boot camps to stackable credentials to meet emerging market demand. The diversity of disciplines coupled with a wellthought-out methodology for transdisciplinary collaboration is a means to in-depth, long-term investigations into complex issues, such as urban development, healthcare and climate change.

"The thing that excites me most is getting the real world built into the same enterprise along with the University," says PhilaU's director of industrial design programs Tod Corlett. "Within Jefferson, some of the world's most talented people are already working on the key problems we'll need to solve in the coming decades. Our students will get to work at their sides and gain greater understanding of the complexity of working in reality. This is going to make a big difference."

Kanbar College Executive Dean Ron Kander says, "Companies are less interested in what a person knows and more interested in what a person can do. This plays to our strength as a place that gives people real, hands-on skills that can be immediately applied to the world of work. The integration with Jefferson will only strengthen that value proposition."



Lifelong Disruptors

Most "disruptors" do not innovate their industries from the inside, but that is exactly what PhilaU and Jefferson hope the new, transformed university will do. "To spark the innovation needed to trigger sweeping change in higher ed and healthcare, we must shatter the traditional mold of our industries," says Klasko. "Our disruptive model will enable us to better anticipate the needs and exceed expectations of the 21st-century student, employer and community."

When the integration of the two universities is complete, the combined age of the new entity will be more than three centuries. But Spinelli and Klasko—known as the "Two Steves"—are determined to maintain a startup mindset as the secret to success.

"Startups change industries," says Spinelli. "We have an opportunity to do that. We want to be an example from which a lot of people can learn. That's why it's important we do it right."

Disruptive innovation leads people to change the way they value a product or service. While many are questioning the value of the current higher education system, even the disruptors say the future looks bright for a reinvented higher ed. As Godin believes, "Higher education is vitally important to our future. It's one of the best reasons to be a citizen, to be a person in our society. It has the potential to change lives and open doors. But we need to push in the right direction."

Spinelli and Klasko predict the university of the future will look less like the four-year institutions of today and more like year-round, 24/7 learning labs in which individuals dip in and out

physically and virtually over the course of their career. As McGowan notes, "A typical career will likely be a decade or more longer based on advances in human longevity. A longer career means more change cycles, more change cycles means more learning. GSV Capital predicts that educational spending will go from nine percent to 12 percent of GDP in anticipation of this need for lifelong learning."

move from titles to tag lines, the better equipped graduates will be to ride the raging water of the future of work. New generations will need to locate their work in a balance of purpose and passion, skills and aptitudes, and market realities."

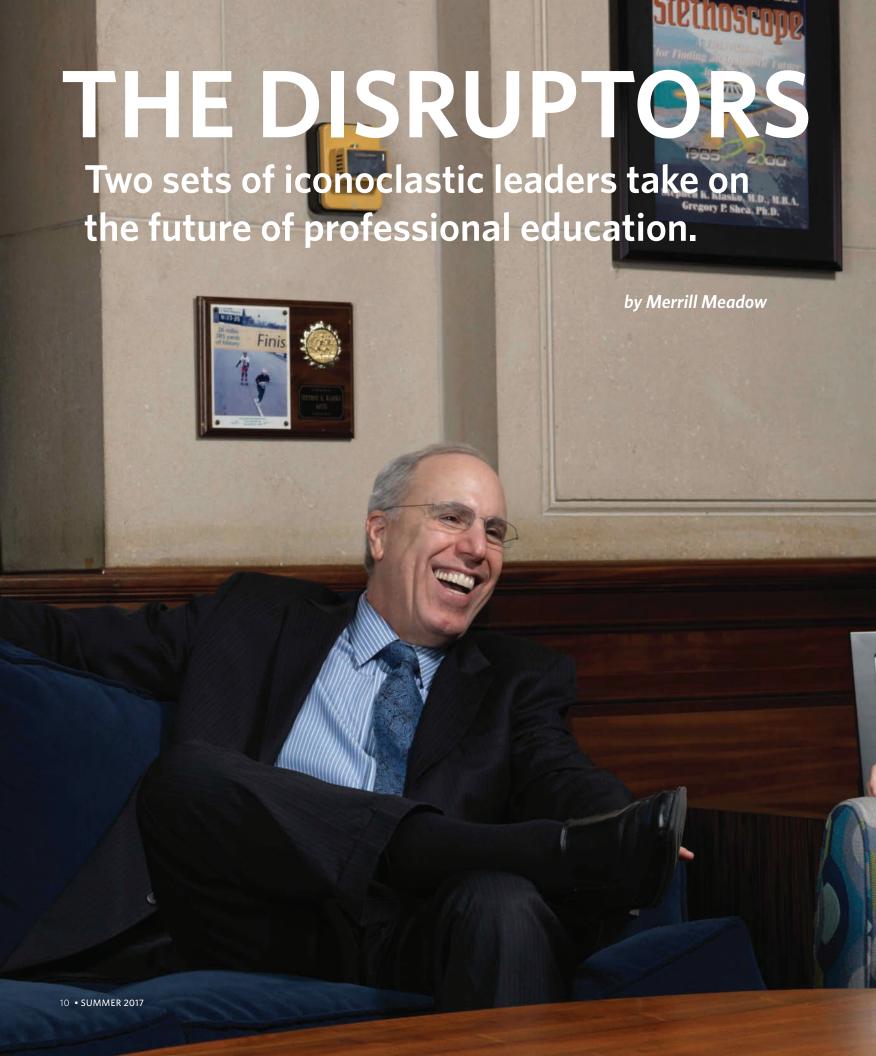
The irony is that in the enduring debate about the purpose of higher education—credentialing versus edification—many have bemoaned the increase in students' career-driven motives. Yet the new world of work is likely to require lifelong learners like never before. More accurately, lifelong disruptors.

The university of the future will look less like the four-year institutions of today and more like year-round, 24/7 learning labs in which individuals dip in and out physically and virtually over the course of their career.

In the context of the union, *Philadelphia Magazine* recently asked Spinelli, "If you were 18 years old, would you be excited or discouraged about the future?"

His answer: "Excited out of my mind. The potential for me to be the lifelong curator of my own learning has never been better. Passions can become professional when students have better control of the experiences that will help them."

"I no longer define myself by my title. I simply introduce myself by telling people what I do," says Bersin. McGowan agrees. "The sooner we Because if job title is no longer as important as what you know, what matters is learning how to continuously reskill yourself to create value and meaning to your profession. And that can be downright revolutionary.







"The number one rule to follow: Never be happy with the way things are; always be thinking about how you can make things better."

MAURICE KANBAR '52, H'03

Still deep in thought, Ku nearly collided with four men heading into the DEC Center: PhilaU President Stephen Spinelli Jr., PhD; president and CEO of Thomas Jefferson University and Jefferson Health Stephen Klasko, MD, MBA; and the two universities' provosts, Matt Baker and Mark Tykocinski.

Spinelli and Klasko—the "Two Steves," as they've since come to be known—had just met that afternoon. On the surface, they had little in common except their first name and job title. Spinelli, an entrepreneur and business executive turned academic turned university administrator, has led PhilaU since 2007, while Klasko, an OB-GYN turned professor, medical school dean and hospital executive, had been Jefferson's president for two years.

But when they ran into Ku, what had been planned as a quick meet-and-greet had run almost two hours. Spinelli and Baker were now showing Klasko and Tykocinski around PhilaU's verdant suburban campus. Something had clicked among them. In fact, Tykocinski commented to Klasko, "We should partner with this university." Additionally, the Two Steves found in each other a kindred spirit—passionate about innovation, comfortable with risk and jazzed by the challenge of leading a university in uncertain times. That click was reinforced as Ku enthusiastically described the ideas he and Corlett were discussing, and the many directions they could go.

Parting with Ku, the quartet continued their campus tour, then wandered toward Klasko's car in the parking lot. "It was like a blind date that had gone surprisingly well," Klasko joked, "and here we were at the awkward point: 'Do I ask for a phone

number?' 'Suggest a second date?'"

Taking a calculated risk, Spinelli dove in. "Look, I know how these things usually go," he told Klasko. "We go back to our offices today, run into each other every few months at charity events around town, and eventually one of us says, 'Let's have our universities do something incremental, perhaps build out a collaboration on medicine and design.""

Spinelli continued, "But I like taking the exact opposite approach, asking up front, 'What's the biggest, craziest thing we could do?' So how about we lock in some more time to talk, soon, and start with that question."

The serendipitous conversation with Ku had crystallized something that the four university leaders had each intuited: There was a range of opportunities for collaboration between the two universities and a broad hunger for what each could offer the other. Jefferson wanted to expand their curriculum beyond health medicine and science, and embed design thinking more broadly into its academic programs. PhilaU envisioned the benefit of scaling its unique Nexus Learning model—a practical, hands-on, collaborative and transdisciplinary approach to professional education.

That's why—instead of a non-committal, let's-see-what-happens response— Klasko said, "You know, sometimes crazy is exactly the right place to start. Let's do it."

Over the next few weeks, the four-part conversation continued. In short order, they knew the answer to Spinelli's initial question: The craziest thing in the world would be to take a 192-year-old health

sciences university and a 133-year-old professionally focused university with roots in 19th-century textiles, and put them together. That idea became the focus of regular discussions. And the more they pondered it, the more people they brought into the conversations—trustees, faculty leaders, administrators, alumni—the more confident they became that it was the right thing to do. In December 2015—six months after the first seed was planted—both university boards of trustees signed a letter of intent to merge.

Fast forward to spring 2017: After extensive analysis, planning and decision-making, the seed is coming to fruition. If, as expected, regulators give their final approval this summer, the two Philadelphia institutions will merge 325 years of combined history into a single—and singular—path to the future.

The near-term goal is to create a comprehensive university that is, as Spinelli describes, "Laser focused on professional education. One that, better than any other, prepares students to address the changing needs of 21st-century employers and society." In this new university, students and faculty will collaborate within their disciplines and across fields and professions. The rigorous curriculum will fuse liberal arts with professional knowledge and skills; it will empower students as navigators of their own educational journey.

In the longer term—if Spinelli, Klasko, Baker and Tykocinski have their iconoclastic way—the merged institution will create a new model of professional education, delivering a disruptive jolt to all of higher education.

Prime for Disruption

Disruption used to be a negative word. It conjured an ordered scene thrown into unproductive chaos—the hypothetical bull in a china shop.

Today, however, disruption is a capacity, much sought-after. The capacity to change how people value products or services and, in the process, to remake an entire industry. Think Apple, Amazon, AirBnB, Uber.

If ever a field was ripe for disruption—
for a way to provide value matching
consumers' needs—it's higher education.
Colleges and universities across the
nation have been faulted for failing to
give graduates the core skills needed
for continuing success in tomorrow's
workforce: to communicate and
collaborate; to solve problems and
resolve conflict; to be creative, diligent
and resilient; above all, to continue
learning.

"When Steve and I met each other in 2015, we both knew that higher education was undergoing the first stages of revolution," recalls Spinelli, "and that linked us together from the outset."

The Two Steves recognized that the environment was primed for a disruptive force—for an institution that was willing to take all preconceptions and assumptions off the planning table. "In times like these, leaders cannot allow their hopes and preferences to filter out the tough realities," Klasko says. "So, you could say the most important skill Steve and I employ is not deluding ourselves."

"In times like these, leaders cannot allow their hopes and preferences to filter out the tough realities."

STEPHEN KLASKO, MD, MBA
PRESIDENT AND CEO
THOMAS JEFFERSON UNIVERSITY AND JEFFERSON HEALTH



These days, it is a skill in short supply. Most academic and healthcare organizations evaluate success using retrospective and short-term measures: How did we do this year versus last? How well do we stack up against our biggest competitors? What are our *U.S. News & World Report* rankings? Asking those questions enables their leaders to keep their eyes off the horizon. It allows them to avoid digging deep and asking tough questions like: Are we delivering what our customers really need? Are we reflecting changes in the environment? Are we prepared to address what's barreling at us from just over the horizon?

Most of these institutions have opted not to see the waves of change coming higher and faster, oblivious to the very real possibility that they will be swamped by those waves. To their credit, some institutions have begun to change course to reflect the coming storm, shifting in a slow, steady arc. But deliberately paced, incremental change may also be a losing proposition. Klasko and Spinelli certainly think so. "Academics and healthcare are the two most screwed up industries on the planet, and have been for a

while," Klasko says. "Lots of solutions have been tried, unsuccessfully, and they failed primarily because they were incremental." And if there's one thing neither he nor Spinelli has ever been accused of, it's being an incrementalist.

They are, however, insiders, denizens of the murky waters roiling with change. And, traditionally, disruption has occurred from the outside, driven by innovators with a different vantage point and a fresh perspective. But the Spinelli and Klasko are not cut from the same cloth as most university leaders: more creative and free-thinking, less risk averse, better attuned to nuances of organizational dynamics. Neither of them trod a traditional path to a university presidency. "We are, in important ways, insiders with outsiders' perspectives," Spinelli says. "It feels natural to us to be disruptors from the inside. In fact, it could be argued that our hybrid perspective is essential to making disruption succeed in these very complex kinds of organizations."

Perhaps the most salient characteristic that Spinelli and Klasko have in common is a deep-seated commitment to innovation. The innovator's persona is what the Two Steves read in each other at their first meeting.

Spinelli has been a student, teacher and practitioner of innovation—and its business embodiment, entrepreneurship—for most of his life. It is the thread that connects the disparate facets of his career. It's the catalytic force behind PhilaU's vibrant growth over the last eight years, and the key to its ability to be vital and relevant in a constantly changing environment.

For his part, Klasko stares innovation in the face every day: Directly across from his desk hang a colorful painting of Albert Einstein—the ultimate disruptor, whose thought experiments changed how we see the universe—and a photograph of Apple founder Steve Jobs. "Jobs made decisions based not on where the world was today, but on where he believed it should be in 10 years—even if, in the short run, those decisions threatened an existing part of Apple's business model," Klasko explains. "We need that kind of courageous innovation in higher education."



Spinelli and Klasko are not alone in their inclination toward innovation: Baker and Tykocinski are both recognized for driving development of novel programs and taking fresh approaches to curricula. "The idea of combining two universities dedicated to pursuing transdisciplinary innovative approaches to address the big issues in society is thrilling. The curricular emphasis at both institutions around collaboration, design thinking, innovation and integration with the humanities and liberal arts to make a better world is inspiring," observes Baker.

Tykocinski agrees. "The synergistic capabilities of both universities will enhance Jefferson's ability to further push the boundaries on groundbreaking discovery in basic, applied and translational research. These discoveries have the ability to impact and improve lives in important ways."

All four are determined that the new organization not give lip-service to innovation. "We won't, as so many other institutions do, just sprinkle innovation as a spice over top of the standard 100-year-old model," says Spinelli. "The innovators will run the show, and innovation will be part of every script." Yet they know that being an innovation-driven organization requires more than just leaders who model innovative thinking. "The entire institution must be animated with an ethos of creativity, receptivity to change, and comfort with both ambiguity and diversity," Spinelli adds. "Our goal is to gene-edit innovation and disruption into the very DNA of the merged university—to make them core competencies throughout the organization. That's the only way to handle the rapid pace of change that's become a norm in 21st-century society."

Knowledge Curators

Disruption demands a clear vision of the value consumers seek. And Spinelli and Klasko believe that students have a very different definition of value today than they had even 10 years ago. The core element of that new definition is control.

"Control is the authority to decide for oneself what is and isn't important, what is and isn't a high-quality education," Spinelli explains. "Control is the key, because it enables one



to determine the significance of all other measures of value. And, increasingly, students are placing a very high value on the ability to drive the content and direction of their education. It's a natural and prudent response to the dynamic world they see around them. But control is useless—even harmful—if not used well. That's why the greatest capacity we can offer students is the knowledge, skills and confidence they'll need to be effective curators of their own education."

Twenty years ago, few college students would think to challenge a 60-year-old adviser telling them what courses to take—and in what order—to pursue a clearly defined career track. But today, Klasko observes, "More students are carving out their own majors, putting together topics that don't match an existing professional path, but one they see emerging to meet new needs in the market.

"We need to nurture their intellectual passions and empower them to carve out careers that match those passions—because they're going to be tomorrow's innovators, inventors and leaders," Klasko argues.

Well and good, one might say, but what about the majority whose interests still dovetail with traditional professional tracks like bioengineering, fashion design, business management, physical therapy or architecture? How will control and "curation" be high-value for them? "Because the world of work is changing constantly, whole professions are morphing, even disappearing," Spinelli explains. "By some assessments, 50 percent of today's occupations could be eliminated within a decade. Beyond that, many people will want to switch careers after a decade or two, just to experience a different path.

"As a result, education is fast becoming a lifelong process. Today's students are going to be curating their own learning for the next 50 years. Colleges that don't empower students to do it well are setting them up for failure; those institutions will, themselves, fail as more and more students find value somewhere else."

On the other hand, universities that embrace this shift in control—that work with students to create high-value educational experiences that empower students as lifelong knowledge curators—will thrive, because they'll have created partners for life. "If we do our job right," Spinelli believes, "the people who come to us as undergraduate and graduate students will continue to be our customers for the next four or five decades."

Doing the job right—empowering students as knowledge curators—certainly means helping students master the fundamentals of their chosen profession. It also means

giving students the capacity to respond to change by acquiring new knowledge for an evolving profession, developing skills for a new profession and demonstrating resilience in the face of setbacks. Surprising as it may sound for the leaders of professional education universities, Spinelli and Klasko view the liberal arts as fundamental to that capacity.

"Anyone who thinks it is less valuable to understand the world qualitatively than quantitatively is mistaken," Spinelli asserts. "I've created companies and studied industries, and I know that quantitative skills can only go so far. The growth in technology actually enhances the value of people who have a sense of the social, emotional, cultural and historical circumstances in which they work and live."

Spinelli recalls the first time Klasko addressed the PhilaU faculty. "Our faculty is committed to incorporating liberal arts studies—in a deep and meaningful way—in all of our programs, from graphic design to midwifery to engineering and textile materials. And Jefferson is a premier biomedical institution, built on hard science and peer-reviewed research. So our faculty came into that meeting with an understandable concern about quantitative and technical perspectives superseding all other ways of thinking in the merged university. But when Steve shared his thoughts on empathy as a requirement for new medical students, the liberal arts professors' eyes lit up. Then he said, 'That's why we're going to add liberal arts faculty to the medical school admissions committees."

Objective Assessment

Ultimately, the decision to integrate the institutions was the result of an objective assessment that—in the long run—the universities together could accomplish the disruptive strategy that Spinelli, Klasko, Baker and Tykocinski knew would be necessary to thrive deep into the 21st century. Although both universities already excel at preparing graduates for the real world of work they'll face, neither offered as broad a range of intellectual resources and professional expertise as future students would need and expect. So, when initial skeptics called the merger an unnatural mash-up of two very different institutions, the four leaders just smiled and thought to themselves: Yeah, like chocolate and peanut butter.

"Many people who initially questioned this merger were working with dated perspectives," recalls Baker. "Today's PhilaU and Jefferson are each very different from what they were just 15 years ago. Just as important, higher education has changed big-time. So step back, look again, and you start seeing a raft of opportunities—to ask questions differently, to attack long-standing problems with new energy, to pursue previously unconsidered collaborations, to help people in completely novel ways."

Tykocinski took it one step further. "The more you look below the surface, the clearer it becomes that this is a marriage of complementary organizations united by a

single disruptive vision. The new university will have a beautiful range of academic fields: from medicine, nursing, public health and midwifery to architecture, design, business, engineering and strategic leadership—all with a firm liberal arts grounding. Yet, the real beauty of the integration becomes clear when you envision the academic environment not as a spectrum but as a sphere: each profession and discipline having a place on the circumference and a robust web of connections crisscrossing through the interior, linking virtually every field to every other."

Both institutions had already been moving beyond the days when programs, departments and colleges operated in self-sustaining silos. "The merger allows us to drive interdependencies forward faster, better enabling us to respond to the needs of students and their future employers," Baker observes. "We'll also be better positioned for growth—with a matrix of transdisciplinary connections through which we will serve students, communities, industries and society in a much richer way than we have been capable of before."

Those benefits include both universities having access to premier faculties of medicine and biomedical professions, architecture, design, business and engineering. Plus, a wholly new learning environment with Jefferson's vibrant Center City locations complementing PhilaU's park-like campus: a larger, richer set of online learning offerings; an expanded





group of industry partners, with locations around the world; and a wider, deeper array of opportunities for PhilaU students to gain hands-on professional experience. "I remind people not to overlook the Jefferson Health side of the organization," Baker remarks. "Beyond a first-class academic medical center and health system, it's a huge, multifaceted and complex business operation—rich with opportunities for all of our students to gain experience and for our faculty to pursue new collaborations and impactful research. It is an important part of the ecosystem of education we are building."

The bottom line, Baker believes, is that "PhilaU will be better positioned to help prepare our students for emerging challenges, enabling them to flow with the major changes we already see coming—artificial intelligence and robotics, for example—and not have their careers sidetracked by those changes."

PhilaU third-year architecture student
Raymond Bracy has a front-row seat on
the emerging opportunities. "There was
concern that it would only benefit certain
students, but new activities between the
two universities have already quelled those
doubts. For example, my design studio recently
held a competition for a glass pavilion that
conceptually linked the two universities. The
winning design will be built this summer," Bracy
says. "This is a unique activity that would not
have been possible without the merger. And I

think it foreshadows new opportunities for all PhilaU students."

Then there is the very real financial upside of being part of a large and robust organization. The bigger scale will improve buying power, lower financing and insurance costs, and improve long-term operational efficiencies. Jefferson also has a considerably larger fundraising base and a track record of garnering very big—hundred-million-dollar big—philanthropic gifts.

It was natural that the financial benefits were what first struck Orlando Esposito, who earned a bachelor's degree in accounting from then-Philadelphia College of Textiles and Science in 1980 and now runs the asset management business at PNC, Inc. Esposito joined the University's Board of Trustees in the fall of 2015, and it was at his inaugural meeting that a PhilaU-Jefferson integration was first formally discussed. "It was clear from the outset that—purely in dollars-and-cents terms—the idea deserved serious consideration," he recalls. "But the numbers alone would not have made it the right move.

"I ultimately supported the merger," Esposito explains, "because it will make PhilaU better, across-the-board, for students. Non-academic student life will be stronger. The academic program will be richer, with new curricula, pedagogies and learning tools. In addition, undergraduates will have access to a much

larger group of stellar graduate students." As the first person in his family to go to college, what excites Esposito most is that the merger "creates new opportunities for us to reach out to smart, talented kids who have the ability but not the resources to pursue a superb professional education. It enables us to assemble the best possible class from a broader, more diverse array of students."

A Prelude

To say that the past two years have been a whirlwind of activity for Spinelli, Klasko, Baker and Tykocinski would be an understatement. And yet, it's just a prelude. Soon begins the tougher work: turning two institutions into one functional unit; fleshing out a singular and effective model of professional education; and proving that their vision is both disruptive and enduring. Neither of those things are likely to happen quickly. It could be a decade before this endeavor's success can be fully judged.

What might success look like in 2027?

"Quantitative, competitive metrics, which seem so important today, will be much less relevant in 10 years," Klasko posits. "More important will be whether we have successfully implemented a model of professional education that excites people and spurs emulation."

"Certainly, it will be a model where innovation and curation are prized by both students and faculty," adds Spinelli. "But it will also be a model where universities and the professionals employing our graduates become long-term collaborators in education and ongoing professional development. An environment where changing professional education needs are translated from employer to university to student on a scale of weeks and months, not years and decades.

"And if we succeed at doing that—creating a steadily evolving, multifaceted 'ecosystem' of teaching and learning, where innovation is the norm and artificial distinctions between practice and education blur—then size and ranking won't matter," Spinelli concludes. "We will have disrupted the field, and students and faculty will flock here to experience what we offer."





Building Foundation

Months before pen hits paper on the official documentation uniting Philadelphia University and Thomas Jefferson University into a comprehensive, academic institution, an opportunity to join forces has already shown how combining resources can drastically create innovative learning and technology.

It all began when both universities had individually explored the possibility of becoming part of a Department of Defense (DoD) initiative, which brings together a network of manufacturing entities to accelerate innovation and develop new technologies and workforce training for high-tech, U.S.-based fibers and textiles manufacturing.

As the integration talks intensified, the universities saw this as a springboard for streamlining their efforts to become a collaborative member of this unique DoD partnership.

The DoD's Advanced Functional Fabrics of America (AFFOA) Institute is a national, public-private consortium led by MIT and consisting of U.S. universities, industry members, manufacturing entities and startup incubators. Their goal: advance a new model of American textile manufacturing and develop new products that have extraordinary properties for the public and defense sectors.

As members of the academic branch of the consortium, the PhilaU and Jefferson partnership hopes to extend the boundaries of research by combining their particular skills, expertise and resources to create state-of-the-art ideas and technological possibilities for technical textiles, including fabrics that have the ability to see, hear and sense a person's surroundings; communicate; store and convert energy; monitor health; control temperature; and change color.

"This initiative is part of the combination of PhilaU and Jefferson to create fundamentally new research and education capabilities and opportunities," says D. R. Widder, vice president of innovation at PhilaU. "Together, we will drive innovations that will revolutionize smart textile applications that capitalize on and strengthen our relationships with industry partners, which is integral to cutting-edge professional education."

This "fabric revolution," as it has come to be called, merges state-of-the-art technology with age-old ingenuity, sparking groundbreaking possibilities for the textile industry. PhilaU's

reputation for being at the forefront of preparing students to create innovations for printed, woven and knitted products made them an obvious candidate for inclusion in the AFFOA partnership.

"Through involvement in the institute, we can connect with a local and national group of visionaries, who, like us, are motivated to scale up production of new fibers and textile technologies," notes Ron Kander, executive dean, Kanbar College of Design, Engineering and Commerce.

The vision of presidents Stephen Spinelli and Stephen Klasko for a comprehensive university is well-suited for the AFFOA partnership. By joining the consortium, PhilaU and Jefferson will be uniquely positioned for a leadership role, and for building out their collaboration in medicine and design for military technology, medical care, wearable technology and fashion. Not only will they learn from each other, but there is also the opportunity to connect with a broader base of fabric and textile experts committed to helping nurture emerging industries and textiles.

Additionally, Kander and Widder agree that being a member of this consortium is a validation of the power of the PhilaU and Jefferson integration, and provides the energy and momentum to expand the boundaries of research for creating change and impact for improving lives through advanced fabric products.

Mark Sunderland, director of PhilaU's textile materials technology program, has been hands on with the development process and sees this alliance as a wonderful opportunity for students at both universities.

"The AFFOA alliance will further both universities by allowing students to become part of a process of dynamic change and new technology that meets the needs of tomorrow's market and work place," Sunderland says.

Other academic partners include Drexel University, University of Massachusetts at Amherst, University of Georgia, University of Tennessee and University of Texas at Austin. Jefferson is one of the few national clinical partners and the only one in the Philadelphia region.

"Joining forces has the potential to create breakthroughs in fiber materials and manufacturing," says Kander, "and that's what has always defined our mission."

ALSO IN THE WORKS

NSF GRANT PROPOSAL FOR SMART AND CONNECTED COMMUNITIES

Philadelphia University's College of Architecture and the Built Environment and Thomas Jefferson University's College of Population Health have an opportunity to jointly enter an interdisciplinary National Science Foundation proposal with Oak Ridge **National Laboratories** and the University of Tennessee. Research possibilities resulting from this collaboration include: identifying the interconnectivity of health, energy and transportation within the city of Philadelphia; evaluating the interdependencies between health, energy and transportation; and developing tools to transform existing cities into cities of the 22nd century.

CANNABIS RESEARCH

Ecofibre, an Australianbased company focused on the development of technologies for industrial hemp and cannabis research, has identified Philadelphia University and Thomas Jefferson University's Lambert Center for the Study of Medicinal Cannabis and Hemp to conduct hemp fiber and cannabis oil research. PhilaU will focus on fiber and hurd's industrial and consumer components, while lefferson will examine the medicinal and nutraceutical side of the oils.

Reshaping the way people interact with the world around them is just a part of the possibilities resulting from the integration.

Successful collaborations and partnerships like AFFOA are vital for the universities and provide a foundation for an even greater future.

Fashion as a Metaphor

by Mark L. Tykocinski, MD Provost, Thomas Jefferson University

"The fashion show is a wonderful metaphor for the importance of design thinking for 21st century professionals."

This past April, I had an eye-opening experience: I attended Philadelphia University's fashion design program's annual show for the first time. More than 400 apparel designs were on display that night. Each was stunning in its execution, demonstrating a unique vision wedded to a distinct cultural touchstone. These were fresh, vibrant designs that spoke to the present moment, while reflecting inspirations ranging from 19th century artists to ancient Mayan culture.

It was impossible not to be awed by the creativity, skill, imagination, energy and determination exhibited that evening. No wonder that the sold-out audience included many apparel industry professionals and fashion journalists, or that PhilaU's fashion design program is recognized as one of the world's best.

But I must admit that, as an educator, I was even more impressed by the learning process underlying what came to fruition on the runway. It was a process driven by collaboration: Each design was the product of a head-to-toe partnership among

students from four distinct programs—
fashion design, textile design, graphic design
and industrial design. And the show itself was
produced by students in the fashion design,
merchandising and management programs.

The learning process was built on a foundation of design thinking—an approach that combines acute thinking, sharp skills, boundless creativity and a deep sense of empathy. It is a powerful way to recognize needs, solve problems and define opportunities; and it's inherently peoplefocused. In my work as a university provost and medical school dean, I've worked hard to bring design thinking more deeply into the education of health professionals.

The more I think about the fashion show, the more I believe it is a wonderful metaphor for the importance of design thinking for 21st century professionals. First, because it mirrors the increasing complexity of the society around us. Behind the beautiful veneer, running a fashion show—and creating the designs it will highlight—is a multifaceted endeavor. Myriad options, opinions, decisions, technical factors, pitfalls, conflicts and inspirations go into conceiving, defining, producing and presenting the final product. It was by using design thinking approaches that the students (really, they are emerging professionals) behind the show were able to work through the complications and the contrasting perspectives to triumphant results.

Second, because the fashion show was a whir of constant motion, model succeeding model in a stream of fresh sights and new sounds.



Indeed, fashion itself is fleeting, marked by near-constant change. In these respects, the show mirrored the swiftly changing world around us—and the continuing evolution in the nature of work and of professions. If we seek to prepare our students to be continuously productive and effective in the emerging global economy, we must enable them to anticipate and constructively address change. And in this, design thinking is essential.

Last fall, The Brookings Institution published an incisive essay on addressing the challenges of education in the era of continuous technological disruption. Its prescription, simply put, was design learning: "Rather than transferring a fixed body of knowledge and practices from experts to amateurs, design learning focuses instead on developing a learner's capacity to explore, make sense, and craft new innovation in the search for new opportunities. In this way, design learning is a core educational literacy that...facilitates the development of the entrepreneurial dispositions and skills necessary to adapt to rapid social and technological change."

I think that—had the Brookings essayists attended the PhilaU Fashion Design Show—they would have been nodding their heads and saying to each other, "Yes, this is what we mean!" And I would have told them that this is just one more example of why I'm so excited about partnering with PhilaU faculty and students.





