

Stanford 2025

Uncharted Territory



A Guide To
Reimagining
Higher Education



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MAPPING YOUR INNOVATION INTENT

"Designing the Wicked Problems Curriculum"

Students

Who are my students?
What unique needs do they have?
When and where do they learn best?



Help all students be agents of positive change

* Begin with a Wicked Problem Community of Practice w/ footing in the Core!

Point of View

What are my values & beliefs about learning? About a college education?
What will my students be uniquely equipped for after graduating?
What will they be known for?

Resources

Where is my sphere of influence strongest? In what arenas do I have decision-making authority? Who are collaborators in my circle? What resources do I have access to?

*This map is from Randy Bass, Vice Provost at Georgetown. Meet us inside the back cover to map your own...

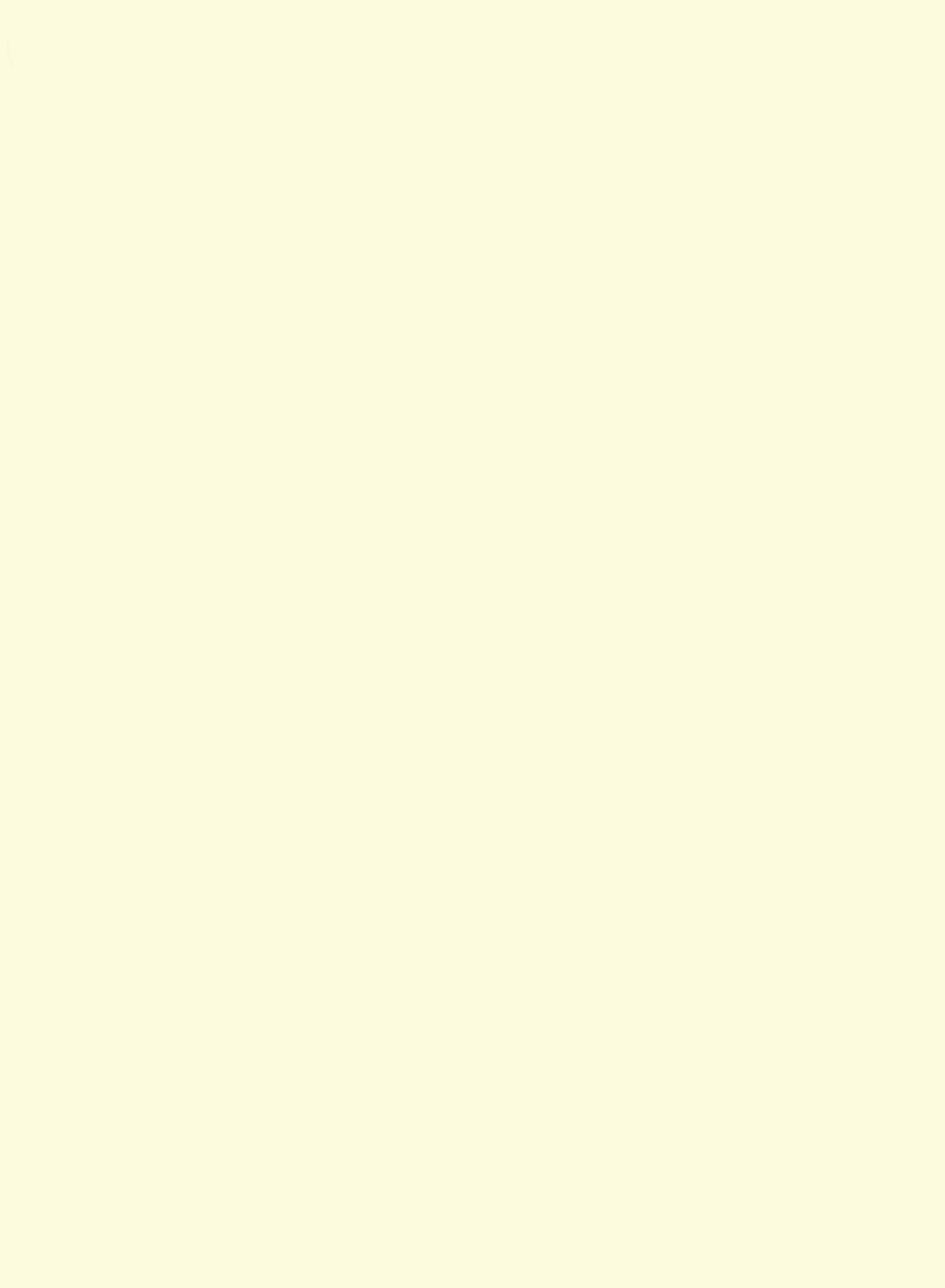
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Stanford 2025

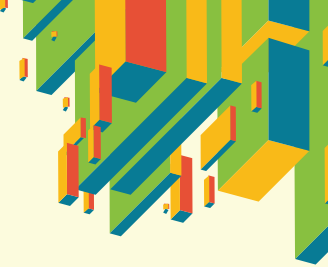
Uncharted Territory



TRAVEL
v
A Guide To
Reimagining
Higher Education



Welcome to Uncharted Territory.



We feel it too—the future shape of higher ed is uncertain. It’s full of ambiguity, changing constraints, and new student challenges. Yet we can all agree that education is a cornerstone of a thriving society. We’re collectively inspired by a huge opportunity: if we address contemporary needs and design new approaches, higher education can be truly transformational.

This guide is Part Two of the Stanford 2025 project—an exploration of the ways institutions have begun to chart new paths through this evolving environment. The project was conceived and led by educators and designers at Stanford University’s Hasso Plattner Institute of Design (better known as the d.school). We’re excited to share what we’ve learned from featured innovators whose work is illuminating new possibilities for the sector, and most importantly, for students.

Education is an exceptionally challenging space for innovation for a number of reasons. It is complex and difficult to

measure which variables contribute most to student outcomes. Financial and other institutional constraints abound. Individuals are protective of institutional legacy, or struggle with how to experiment with new ideas while fulfilling commitments to current students. Perhaps most of all, there are ideological (or at least deep-seated) beliefs about how education “should” be. We think the leaders profiled in this guide are making important contributions to how we all can think differently about the future of higher education. Their persistence, bias toward action, and just plain gutsiness, are inspiring.

The original Stanford 2025 project responded to a specific moment of disruption: the growing popularity of MOOCs and online learning, and the rising cost of higher ed. We saw then that a number of forces were beginning to destabilize traditional models. These rapidly unfolding changes led us to wonder whether there was still a role for place-based education in such a world

and whether other transformations might result. It is in such moments that change often happens—even within an entrenched system.

Back in May 2014, many aspects of the undergraduate experience appeared ripe for reinvention. We began to consider what those might look like, bringing our community along on a thought experiment or “journey” to the year 2100. We imagined a range of different futures, including the rise of the **Open Loop University**, which entails lifetime learning rather than a four-year experience, and **Purpose Learning**, in which students declare missions not majors, among other ideas.¹

The experiment collectively opened our minds to the beginning of what was possible. We got an enthusiastic response from institutions around the world that began to implement some of the themes

that were highlighted in our four original provocations, or had already started on their own variations.

During the original project, we used a tight constraint to drive specificity limiting our frame to the Stanford student experience. The exploration and prototyping that informed our provocations did not involve students at other types of universities, and did not focus on how research or the other roles that universities play in society might work in the future. In Part Two we widen the lens and investigate what is happening at a range of institutions, but retain the focus on the student experience. If the 2025 project that began five years ago was a look into the future, this iteration is an on-the-ground, current plane of existence perspective, looking at models already reshaping the student learning experience.

Over the past five years, the higher education landscape has continued to shift and further innovations have

¹ For the original Stanford 2025 project, visit stanford2025.com



spread. Colleges and universities are experimenting with blended online and in-person classes, finding new ways to reduce costs for students and fund the enterprise, and more schools are expanding the definition of a 'student' to include adult, first-gen, part-time, and more. New disruptors have emerged: third-party education providers, funders, education technology companies, and start-up colleges and universities are now part of the sector.

Bold visionaries are shedding the constraints of what higher education has traditionally looked like; they are creating radical new models that increase access for a more diverse set of students or enable them to better bridge the academic institution and the world they enter after graduating. Their belief

in designing a better student learning experience—and in the true value of a college education—becomes their animating force for change.

We hope this book will make you feel in good company and want to spring into action. Many people who are working inside or outside the system to develop, test, and deploy new models in education periodically feel isolated. The time between identifying an opportunity for change and seeing an innovative solution take hold can be long. The examples throughout this guide remind us that there are many creative people working across all levels in all kinds of educational institutions to reimagine college in a student-centered way.

Enjoy the journey!





Ready to Embark?



We often find that our best inspiration comes from encounters with the unfamiliar, like visiting a foreign country. We gain inspiration from analogous situations that bear relationship to our own, but are different enough to provoke new thinking. While embarking on this exploration of the new possible innovation 'destinations' of higher education, it felt natural to us to think and talk about it as a travel book.

Look for 'travel guides' who are our featured innovators. They will take you on a journey and share 'insider tips' that will help you take your own steps into the future of higher ed. For context, the guide includes provocations from the original 2025 project, insights and trends drawn from secondary research, interviews with innovators and students, and 12 case studies that illustrate some of our findings.

>> LET'S GO!

WE HOPE, AS WITH ANY GOOD TRAVEL GUIDE,
YOU WILL MARK THIS BOOK UP.
WE TOOK THE LIBERTY OF MAKING A
FEW NOTES HERE ☺ THERE TO GET STARTED!

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INSPIRATION FROM THE FUTURE: PROVOCATIONS FROM THE ORIGINAL STANFORD 2025 PROJECT

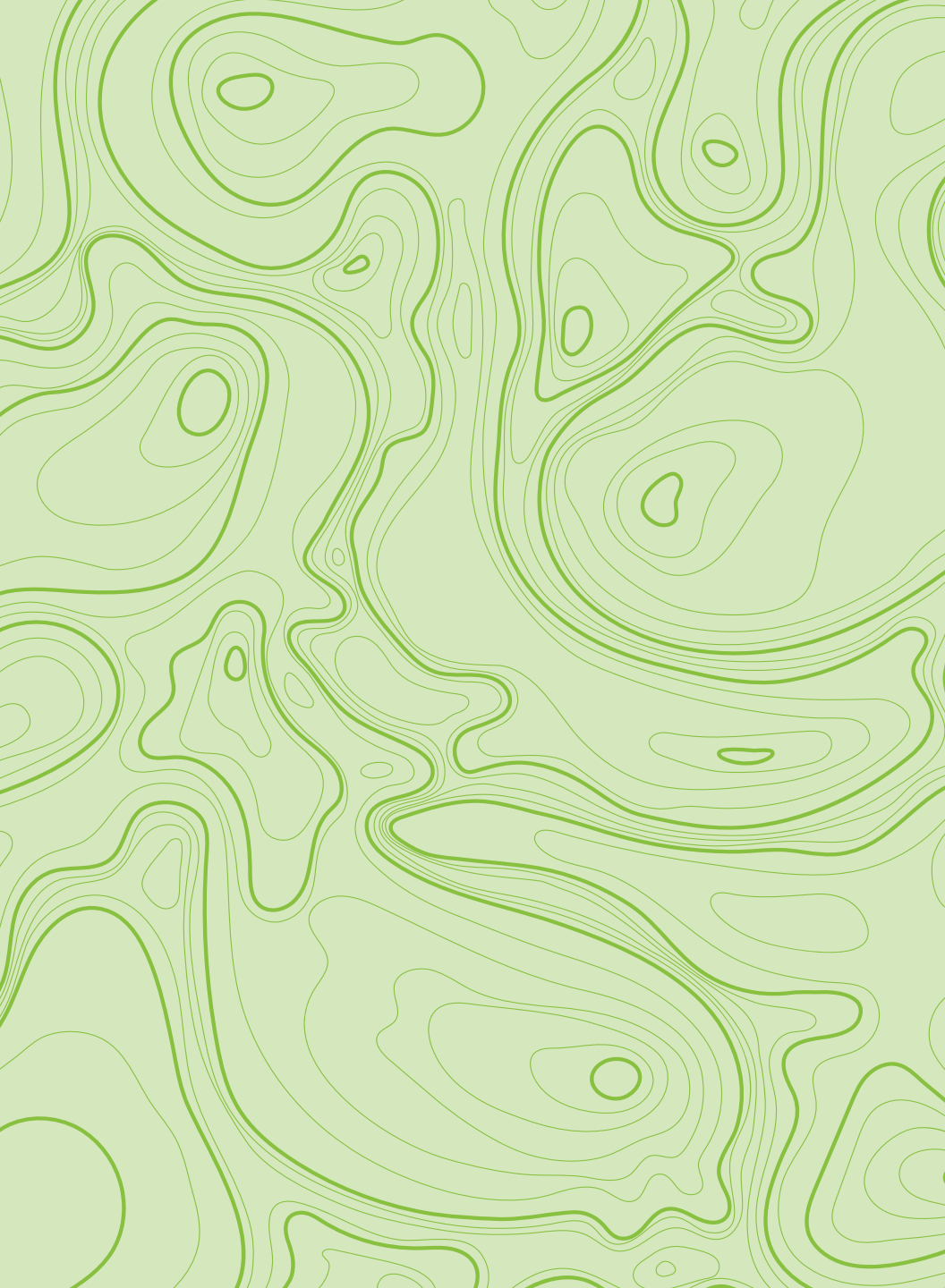
When we first embarked on the Stanford 2025 project five years ago, we put learners at the center of the design process in multiple ways. Our students, ranging from freshmen to mid-career fellows, conducted interviews and engaged with a wide array of other students across campus, sought inspiration from non-traditional and more formal learning environments, and built dozens of prototypes for new models of education. We listened deeply to all of these students and distilled many opportunities where the higher ed system could change and evolve.


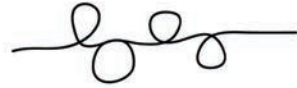
The d.school prepares people to tackle design challenges that are highly ambiguous and open-ended, and it was fascinating to turn this approach on the

university itself. Since no one can predict the future, we shared four visions that involved a range of wild ideas—some of which required technology not yet invented, and others requiring whole-scale shifts in how we think about learning. Throughout the process, we tested and shared ideas with hundreds of students, faculty, and administrators.

One fascinating complication we discovered while interviewing people about the future of education was how tied people are to their own experiences in school. It is challenging to conceive of alternate possible futures in a space like education, as people are often deeply rooted in their own sense of what has worked for them or what they believe works for students today.

We intentionally offered the world provocations—rather than plans—to jolt people out of thinking within the constraints of an established system. Our efforts yielded four provocations, each of which disrupted some of the key assumptions on which an institution is built: the “normal” timeframe to be a student, where and when learning happens, how learning is measured, and even the very purpose of a college degree.



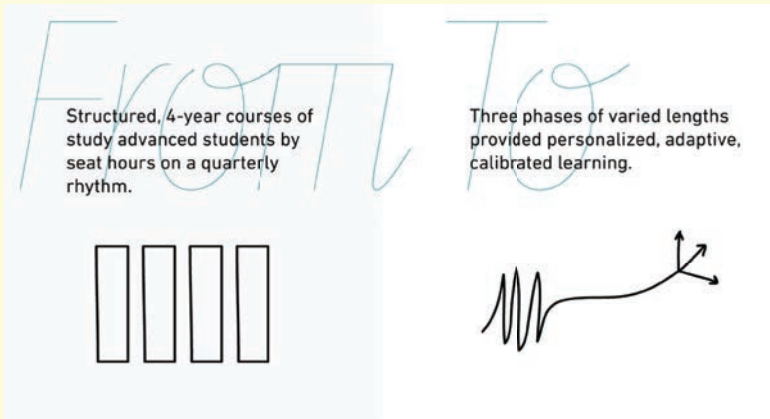
<p><i>From</i></p> <p>Students received four years of college education, front-loaded at the beginning of adulthood.</p> 	<p><i>To</i></p> <p>Students received a lifetime of learning opportunities.</p> 
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The first provocation, **Open Loop University**, proposed a transition from the four-year college model to lifelong learning, allowing students to 'loop' in and out of the college experience at their own pace and on their own time. Now, students would have six years of education to spend over their lifetime.





The second provocation, **Paced Education**, called for the abolition of the traditional class year in favor of personalized phases, which students would move through at their own pace. It also endeavored to tailor the spaces and environments to the mode of learning at hand. Instead of freshman, sophomore, junior, and senior years, students would learn in three phases: Calibrate, Elevate, and Activate.



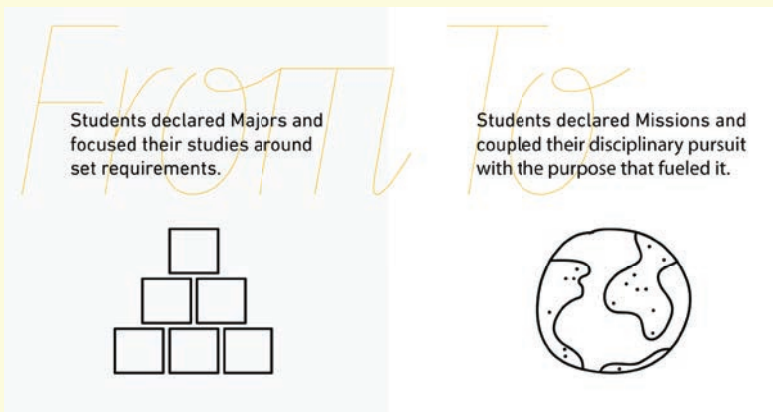
The third provocation, **Axis Flip**, focused on developing transferable skills and competencies throughout the higher ed experience. It also created tools for capturing a more comprehensive narrative about a student's accomplishments, both curricular and co-curricular. Instead of undergraduate education organized around disciplinary topics, students learn through interdisciplinary 'competency hubs.'





Finally, the fourth provocation, **Purpose Learning**, suggested pursuing 'missions' rather than majors, inviting students to think about the 'why' behind their area of study. Now there would be a combination of academic requirements and 'impact' requirements for students' learning.

Many of the vectors for change that underpinned these provocations are still true. Today, we explore eight potential 'destinations' or themes observed through our research into higher ed trends and institutional case studies that build from the work of our initial project.



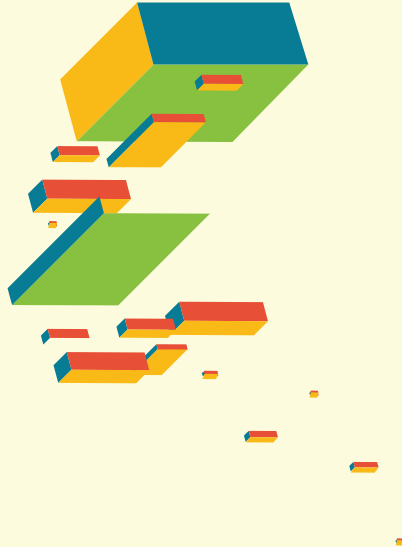


INSIGHTS & DIRECTIONS



Through our conversations with higher ed innovators and entrepreneurs, we began to hear a number of themes and patterns emerge. Some of these patterns are already starting to shape the design of the student experience in novel ways. Many are in response to shifts we are all feeling in the higher ed sector, such as the economic pressures facing both institutions and students, or the changing demands of the complex world we live in.

These themes were echoed through a series of student interviews. Students from a diversity of backgrounds and life experiences highlighted where and how their needs are changing too.



The themes we identified are brought to life through higher ed innovator interviews, secondary research, and quotes from the students we spoke with, along with some provocations for how visionaries could begin shaping change.

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Shifting Terrain:

‘WHEN & WHERE’ LEARNING HAPPENS

We think of a ‘standard’ college student in the U.S. as someone who pursues a Bachelor’s degree for four years at a brick-and-mortar college campus, and graduates at 22. That’s still true for some.

But ‘When’ and ‘Where’ learning happens is shifting on a significant scale, which means it’s time to question some of the core assumptions about how higher education is designed.

Students vary more widely across the age spectrum, sometimes entering college later due to household or family responsibilities, re-visiting college at a later age to finish a degree, or entering post-military deployment, among other life paths. Some students enroll in

multiple institutions or engage through a mixture of in-person and online interactions.

Meanwhile, the traditionally-held assumption that students get a degree in four years continues to be challenged: data shows that students on average take more than five years to complete their degree.² New hybrid or fully online models for learning can give students the ability to move at their own pace.

² The Condition of Education. *National Center for Education Statistics.*

Sixty percent of today's undergraduate students are **"post-traditional learners,"** which includes those over the age of 25, those working full-time or with family responsibilities, or those connected to the military.³

The number of part-time **learners increased by 15%** between 2005 and 2015.⁴

More than **30 million Americans** have **some college credit but never graduated**—which is "half again as large as the more than 20 million Americans now enrolled [in college]."⁵

Nearly **6 million people** are enrolled in **online courses** today.⁶

Many of the students we spoke with reflected these shifts. Their experiences are often going against the grain of traditional paces or spaces of higher education—whether related to expectations about age, time spent earning one's degree, or how or where their learning happens.

One student who entered college in his late 20s after time in the military found that he caught administrators and faculty off-guard, as they were accustomed to dealing with 18-year-olds.

"I think there [were] also a lot of times where they felt offended by me because I would just talk to them as I would to anyone else. I would use their first name, and they would correct me and say, 'call me doctor.'"
- Bradley H.

Other students felt swept along a predetermined path based on social norms that was incongruent with their level of maturity or readiness.

"That's just how [college] works. And honestly, that model [of students matriculating right after high school] does not work for everyone. Not everyone is mentally there—where they have their head on straight—when they're 17."- Mike C.

Still other students questioned the very assumption that college was the obvious next step after high school, re-evaluating the timing and value of their education to match their objectives.

"I felt like I was trudging along this path that didn't make sense and that I didn't really want to be on at all. And I was only there because everyone in my family had been to college." - Rory F.

3 American Council on Education.

4 National Center for Education Statistics.

5 Gardner, L. (2019). The Rise of the Mega University. *The Chronicle of Higher Education*.

6 Bailey, A., Vaduganathan, N., Henry, T., Laverdiere, R., & Pugliese, L. (2018). Making Digital Learning Work: Success Strategies from Six Leading Universities and Community Colleges. *The Boston Consulting Group*.

From the perspective of human-centered design, we see these changes as important opportunities to question the fundamentals of higher education and create new learning experiences and rhythms that might better serve the students of today. Many of our conversations with experts and higher ed leaders across the U.S. demonstrate that they're thinking about these changes—and how to address them—in creative ways.

“Broadly, the key thing is that we’re in a moment where we are shifting from where we’ve been for 20 years,” states Randy Bass, Vice Provost of Education at Georgetown University, “from saying ‘we have a sub-population of students who need to change to adapt to us’ to re-thinking who we are to adapt to them.”

For example, some institutions are beginning to modify the expected pace of learning, to adapt to students' changing needs and constraints. College Unbound seeks to make higher ed accessible for

those who have responsibilities beyond being a student, such as full-time work or being a parent. At Western Governors University, students can truly move through the material at their own pace, accelerating where they have existing knowledge or life experience in a given subject.

In addition, new types of learning spaces are cropping up, designed to influence the student experience in new ways. Some institutions are re-tooling in-person learning, with initiatives such as intensive living and learning project-based pursuits at Georgia Tech. Others, such as Minerva, are experimenting with hybrid models that rely on an online learning platform and use the city as classroom.

The patterns we are seeing at these institutions are indicators that change is needed. Although many of them address a need for greater flexibility, they speak to something broader as well: the need to break down structures that were built for exclusivity and to ensure a greater sense of belonging for the 'post-traditional' student.

Institutions that are Changing Paces

Recalibrating the time it takes to move through higher education, allowing for flexibility in when students start, stop, or revisit their education.

African Leadership University
College Unbound
Indian River State College
Make School
Western Governors University

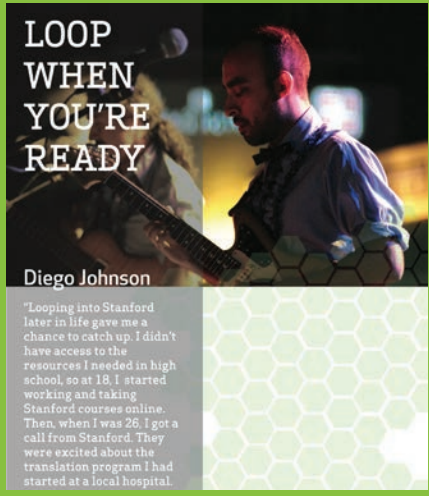
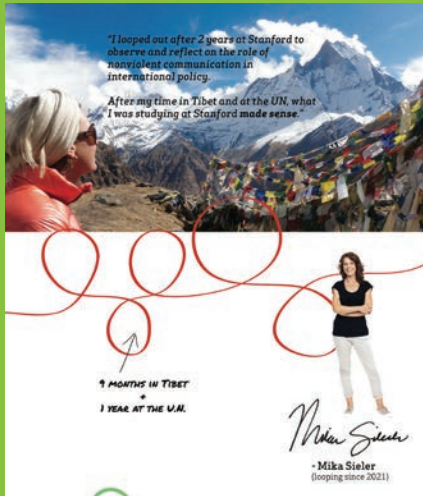
Institutions that are Changing Spaces

Rethinking the where and how learning happens to support different types of student learning.

Georgia Tech
Minerva
University of Utah
Western Governors University



Inspiration: FROM THE STANFORD 2025 ARCHIVE



IMAGINE A "GRIT BIT" TO CALIBRATE LEARNING

IMAGINED STUDENT JOURNEYS OF LOOPING IN AND OUT OF HIGHER ED

What if instead of a four-year degree targeted at students between the ages of 18 and 22, students could have six years of credit to 'spend' over the course of their lives? A student could 'loop out' to get real life experiences or start a venture and then 'loop in' to learn something new or refine a skill they have acquired.

By giving students the opportunity to learn when and how it best suits their needs, they can use their time better and

gain more from the college experience. An open loop model also radically changes the dynamic within a given institution, allowing students to mix with people of different ages and work experiences. How would this change the landscape of students on campus, incorporating a range of ages and work experience, and giving traditionally underrepresented populations greater access to elite institutions?

What if we didn't use age as a proxy for learning maturity? Instead of the traditional freshman, sophomore, junior, and senior years, imagine if students could individually pace themselves through three phases: Calibration, Elevation, and Activation.

Calibration could offer short immersive, introductory experiences for students to come into contact with a wide range of subject areas, learning models, and career trajectories. Elevation would provide intellectual rigor as students dive into a single content area.

What if a student's academic knowledge were translated and activated via internships, service projects, high-caliber research, and entrepreneurship?

How might a 'Paced Education' allow students to learn at their own speed, enabling them to graduate with mastery of not just what they learned, but also how they learn?

To support this self-calibration process, what if a 'Grit Bit' were able to measure a student's learning through biofeedback like stress or adrenaline as easily as a FitBit measures exercise?



Shifting Terrain:

'WHAT' STUDENTS ARE LEARNING—AND HOW THEY'RE ASSESSED

We're not only seeing changes in the 'Where' and the 'When' of learning, but 'What' students learn is being re-thought and re-designed as well.

The world is facing increasingly complex challenges, from refugee crises to climate change. To navigate these unprecedented issues, we need globally-minded people who are equipped to tackle them. This suggests that today's students face an ever more difficult stretch in translating what they learn in school into action once they graduate. Navigating this degree of ambiguity will require students to acquire and practice this capacity while still in a formal learning environment.

Higher ed leaders and innovators recognize this pressure and see opportunities to address it by emphasizing competency and agency development among students.

Noah Pickus of Duke Kunshan University (DKU) highlights the difference between content expertise and competencies, noting that “expertise can be oversold.” Noah believes that the “ability to integrate knowledge and work across fields is more important than memorizing information that is already available on your phone.”

Randy Bass of Georgetown University calls it “dispositional learning,” which he describes as “the traits that put you in a position to acquire and deploy skills” or that will allow you to be effective in the world in a way that is “not defined by subjects.”

Employers and students have their own views about higher ed as well: many are frustrated with the poor level of preparedness with which students enter the workforce post-graduation. Students especially are concerned that what they study does not always directly lend itself to what they hope to do when they graduate.

Ninety-six percent of chief academic officers believe that their students are ready for the workforce—but only 11% of business leaders feel the same.⁶

Just 28% of liberal arts majors and 35% of their STEM counterparts feel they will graduate with the skills they need for success.⁷

The average college graduate can expect to have **more than 11 distinct jobs** before the age of 50—**many of which don't yet exist.⁸**

⁶ What America Needs to Know About Higher Education Redesign. (2014). *Lumina Foundation & Gallup.*

⁷ 2017 College Student Survey: A Nationally Representative Survey of Currently Enrolled Students. (2017). *Strada Education Network & Gallup.*

⁸ U.S. Department of Labor, Bureau of Labor Statistics

The insights of college students we spoke with largely reflected this data. Some students mentioned the pressure of finding a job and having marketable skills—and many times, they highlighted a disconnect between their in-classroom learning and the skills and competencies they gained outside of the classroom.

“Life outside the classroom was as important, if not more important, than what we were learning inside. There was a constant desire to test out what we were learning inside outside.”
- Shan Jee C.

We saw multiple examples of institutions giving students more room to play a role in determining what they learn and have greater agency. Some institutions are taking a radical stance on self-directed projects and peer-based learning, such as at African Leadership University (ALU), where students learn primarily on their own or with peers—and faculty serve as “guides” to help them move through the material.

For schools reorienting their curricula around competencies, meanwhile, this work invites the question of how students will be assessed. In some instances, an institution measures or assesses what a student has learned based on whether they’ve mastered a given competency. At Minerva, for example, students’ competencies are based in and measured by curricular philosophies called “Habits of Mind and Foundational Concepts.”

In other instances, institutions measure both the competencies learned while a student is enrolled as well as those gained in prior experiences. Western Governors University (WGU) follows this model. It doesn’t only measure what a student learns through coursework, but also assesses and assigns value (and credit) to the competencies that a student enters with, from earlier schooling or work experience. College Unbound (CU) similarly does Prior Learning Assessments (PLAs) as a means to measure incoming students’ competencies.

These competency-based models allow a student with say a military background or an adult learner to apply their life experiences to their degree, thereby addressing the variance in age and experience of incoming students as we’ve seen in the previous ‘When’ and ‘Where’ section.

We heard for some students that acknowledgement of their past experience would significantly shift their college experience.

“When you grow up a working class, low-income American, there is no rule book, there’s no handbook. And most of the time your parents don’t know, or they’re at work and there’s no one to ask. So I think it’s making that connection of, ‘I’ve done this in a different capacity, like this is the same skill set, just utilizing it in a different environment.” - Sandy S.



Institutions that are exploring **Competency-Centered learning**

Reorienting the student experience around the whole student—the competencies and skills they bring to college, and their learning beyond courses or disciplines. Valuing and measuring their achievements beyond the traditional transcript.

African Leadership University

College Unbound

Maharishi Invincibility Institute

Minerva

Western Governors University

Institutions that are exploring **Agency-Oriented learning**

Re-centering student agency through personal learning agendas and purposeful learning experiences.

African Leadership University

Bates College

College Unbound

Duke Kunshan University

Georgia Tech

Indian River State College

Maharishi Invincibility Institute

University of Utah

Inspiration: FROM THE STANFORD 2025 ARCHIVE

What if students declared a Mission, not a Major? Perhaps students wrap their course of study around a mission to fuel their studies and give them a sense of self-direction and ownership.

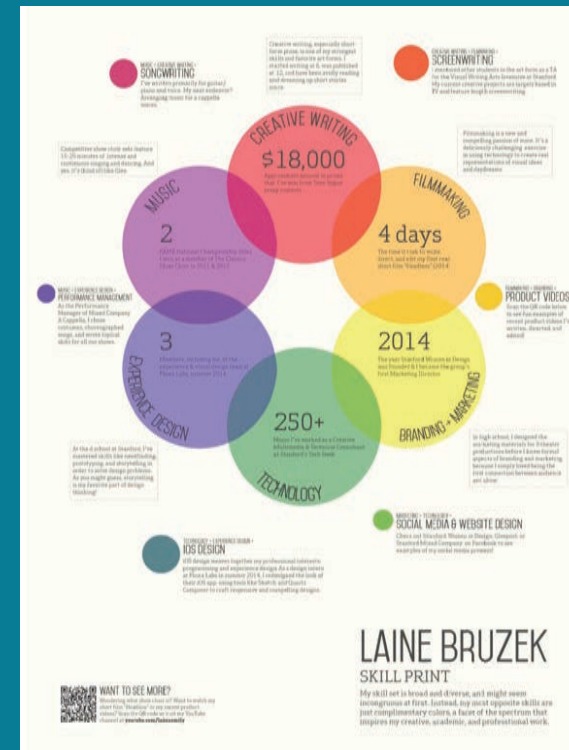


What if instead of a transcript that largely measures seat-hours completed, a "Skillprint" could provide a snapshot of the whole student in a visual that is as unique and nuanced as one's fingerprint?

Whereas the transcript is retrospective and a metadata-poor record of time spent, the Skillprint could become a living artifact of competencies that employers use to assess the future potential

of a candidate, emphasizing learning both in and outside the classroom.

Students found value in articulating their competencies in visual ways. One Stanford design and engineering student commented: "The Skillprint exercise was one of the most useful things I ever made at Stanford. I'm sure it will long outlast any other project in terms of its usefulness in the world beyond Stanford."



VISUALIZED SKILLPRINT
BY A STANFORD JUNIOR
IN ENGINEERING AND
DESIGN

MISSIONS,
NOT MAJORS

SKILLPRINT

Shifting Terrain:

'WHY' BEHIND A COLLEGE EDUCATION

We've looked at how external forces are driving changes to the 'When,' 'Where,' and 'What' of higher ed. But there's at least one area in which changes are coming from within: the 'Why' or animating force behind the design of a college education.

A variety of philosophies inform the innovations that underpin the institutions we profile, influencing not just their curricula and programs, but their entire reason for being. When we talked to innovators, their perspectives reflected varied areas of focus. They each have passionately-held views that shaped their educational philosophies and the institutions they've established or evolved. The more specific the underlying principle, the more distinct these models look from each other.

Ben Nelson, founder of Minerva, believes that there is a need to return to the original aims of a liberal arts curriculum. For him, that means providing students with the knowledge and capabilities to be holistically-developed citizens and active participants in their own governance.

"It is what enables you to be free, not to be a servant or a subject," Ben explains. This liberal arts education allows students to "not be predestined to a vocation."

Marni Baker Stein, Provost and Chief Academic Officer of Western Governors University (WGU) is compelled by another animating force.

"We are 100% student-focused," states Marni. "WGU is committed to measurably increasing social and economic mobility for every one of our students and their families. There is no other part of our business, no other part of our mission—that's it."

WGU's competency-based education model and online environment enables each student to create a personalized experience, moving at the appropriate pace for them.

Fred Swaniker, founder of African Leadership University (ALU), believes that higher education is an opportunity to create change-makers.

Fred's driving purpose in creating ALU is to develop three million "game-changing African leaders, innovators, and problem-solvers" by 2035 who can create opportunities for the rest of the African continent. ALU isn't just focused on education; Fred says that they're "in the business of talent development."

We're already starting to see more variance in the higher ed models, enabling stronger matchmaking between student needs and institutional offerings. Some institutions are focused on career readiness and preparing students for life after college, while others emphasize citizen shaping, or developing individuals who can become agents for change in the world. Still others aim to cultivate more globally-minded graduates or the general formation of the student and his or her personal values. Preparing students for the future is a large part of this equation, regardless of the innovators' more specific goals.

In some cases, institutional leaders are designing solutions for the disconnect between a degree and a career. Skills mapping, for example, helps students draw clear lines between what they learn in the classroom and what they plan to do when they enter the real world. At Make School, faculty and staff collect feedback not only from students but also from members of industry, to ensure that what they teach their students will prepare them for the jobs they seek after graduating.

We're also seeing many institutional leaders emphasizing the value and purpose of a liberal arts education and shaping their students as conscious citizens, not just degree holders. ALU students declare a mission, not a major, and even if they don't pursue their declared mission after graduation, the

hope is that the exercise of doing so will compel the students to think about the impact they want to have in the world.

Some initiatives that we've been inspired by straddle multiple philosophies, such as the Purposeful Work initiative at Bates College. Purposeful Work provides a variety of touchpoints for students to prepare and build purposeful careers, from curricular infusions to a class called "Life Architecture." But it's not just about preparing students for these jobs—Bates also puts an emphasis on how these competencies and tools can help students create a life that is personally fulfilling and full of continuous learning, while impacting the world beyond college.

These examples may be early signs that new models are emerging that move beyond the historic binary that sets the goals of a liberal arts education and professional readiness at opposing ends. We are beginning to see more nuance and variation, resulting from a deeper understanding of the students' lives beyond the classroom, and a stronger point of view of what the students need to be equipped with to navigate and effect change in today's complex world. These views, in turn, inform what elements need to be in place to construct each innovator's unique model.

While the above examples are just a few of the nuanced combinations we're beginning to see, they serve as an invitation for others working in higher

ed to create new configurations and amalgamations, yielding unique models of their own.



Institutions that are Career Crafting

Preparing students to go into the workforce with a purpose. Iterative, impactful career design.

African Leadership University
Bates College
Duke Kunshan University
Georgetown University
Maharishi Invincibility Institute
Make School
Minerva
University of Utah

Institutions that are Citizen Shaping

Preparing students personally and professionally as global citizens.

African Leadership University
Bates College
College Unbound
Duke Kunshan University
Georgetown University
Georgia Tech
Maharishi Invincibility Institute
Minerva

Inspiration:

FROM STANFORD 2025 ARCHIVE



MINI "ACTIVATIONS" FOR STUDENTS TO TRANSLATE THEIR ACADEMIC KNOWLEDGE INTO REAL-WORLD APPLICATION

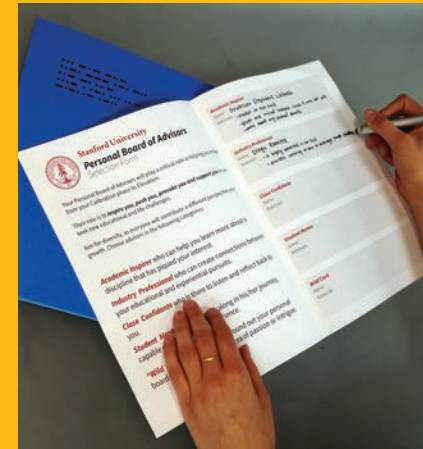
What if instead of launching into a first full-time job without much real work experience, students could apply their skills and knowledge in a range of internships, service projects, high-caliber research, and entrepreneurship, all still within the context and explorational safety of the university?

We know college doesn't just serve to imbue students with knowledge—it also forms them as citizens.

What if in addition to academic requirements, students had 'impact requirements'? Perhaps 'Impact Labs' around the globe—meeting grounds for top faculty and students from multiple institutions—could provide a space for these groups to come together to tackle a deep-rooted, complex problem.



LOCATIONS OF IMPACT LABS AROUND THE WORLD



CRAFTING ONE'S BOARD OF ADVISORS

To help explore and craft one's career, what if each student created and regularly met with a Personal Board of Advisors?

Board roles might include 'academic inspirer,' 'industry professional,' or 'close confidante' to provoke, spur on and support students through regular check-ins.

PERSONAL BOARD OF ADVISORS

MINI-ACTIVATIONS

Shifting Terrain:

'HOW' MODELS OF HIGHER ED ARE STARTING TO SHIFT

If the 'Where,' 'When,' 'What,' and 'Why' of higher ed are changing, it leads us to believe that perhaps some of the foundational structural assumptions around higher ed may need to be reevaluated as well.

The terrain of higher ed is already diverse and evolving. We have institutions that range from two-year colleges to vocational schools, from large four-year research universities to small liberal arts colleges, from private schools to public schools, and online to brick-and-mortar. If you've been keeping up with higher ed news though, you've probably also heard about the string of campus closures and mergers happening throughout the U.S.

More than **1,200 campuses have closed across the U.S.** Between 2014 and 2018 more than 530,000 students were affected by some of these closures—with women, Pell recipients, and minorities most affected.⁹

Since 2000, there have been nearly **40 education mergers in the U.S.;** 40% of these have been between two public institutions.¹⁰

83% of college presidents, provosts and CFOs said their **campuses are increasing partnerships with private firms.**¹¹

⁹ Vazquez, M. & Bauman, D. (2019). How America's College-Closure Crisis Leaves Families Devastated. *The Chronicle of Higher Education*.

¹⁰ Azziz, R., Hentschke, G.C., Jacobs, B.C., Jacobs, L.A., Ladd, H. (2017).

Mergers in higher education: A proactive strategy to a better future? *TIAA Institute*.

¹¹ Paterson, J. (2019, March 28). Outsourcing is growing at most campuses, college leaders say. *Education Dive*.





The cost of getting a college degree is already high—and it continues to rise. This is due in part to decreased government funding. At the same time, stagnating wages and rising student debt make affordability a central question when considering higher ed options—and some students are now choosing to forego it entirely.

The **cost of a four-year degree doubled from 1989 to 2016**, a rate that is nearly eight times faster than the growth in wages.¹²

Student debt is rising: student debt is the largest share of debt in the country, at over **\$1.6997 trillion**.¹³

A #RealCollege survey of nearly 86,000 students at 123, two- and four-year institutions across the U.S. found that **45% of respondents had experienced food insecurity** in the previous 30 days, while 56% were housing insecure in the previous year.¹⁴

Almost all students we spoke with mentioned the pressure of finances in one form or another—whether that was the constraints of paying for college in the first place, or the consideration of earning an income during and after college as they were navigating their postsecondary experiences.

“I had originally thought that everything was going to be paid for just because I had also gotten the [scholarship] going into school, but [my school] is weird and they don’t let you use all the scholarship money. So it was almost useless. They only paid for health insurance.”
- Silvia N.

“I was looking into [apprenticeship programs] and was able to get my degree completely debt free...whatever company you work for in the apprenticeship, they paid for all your tuition, all your books so [you’re] coming out debt free...” - Chad R.

The pressures that both institutions and students are facing create a shared incentive: to find a way to make affordability or accessibility of higher ed for students and sustainability of the institutions align.

Some institutions are already coming up with inventive ways to address these shifting needs, such as mergers or public-private partnerships.¹⁵

12 Ark, T. V. (2019, June 17). 12 Trends Killing College. *Forbes*.
13 Current Student Loan Debt in the United States. *College Debt*.

14 Goldrick-Rab, S., Baker-Smith, C., Coca, V., Looker, E., & Williams, T. (2019). College and University Basic Needs Insecurity: A National #RealCollege Survey Report. *The Hope Center*.

15 Carlson, S. (2019). The Trends Report 2019: Other Changes on the Horizon. *The Chronicle of Higher Education*.

Others are considering holistic affordability, piloting different financial models. Income share agreements (ISAs) such as those at Make School are one example. At Western Governors University (WGU), they use online third-party education providers and give students credit for prior learning, among other cost-cutting measures, to keep the price of a degree down for students.



Institutions that are utilizing Hidden Levers for change

Reconfiguring the infrastructure and building blocks of higher education institutions.

Duke Kunshan University
Georgetown University
Georgia Tech
Indian River State College
Minerva
Western Governors University

Institutions that are exploring new models for Radical Affordability

Reimagining the way that higher education is financed, business models are configured, and students afford higher education.

College Unbound
Indian River State College
Maharishi Invincibility Institute
Make School
Western Governors University

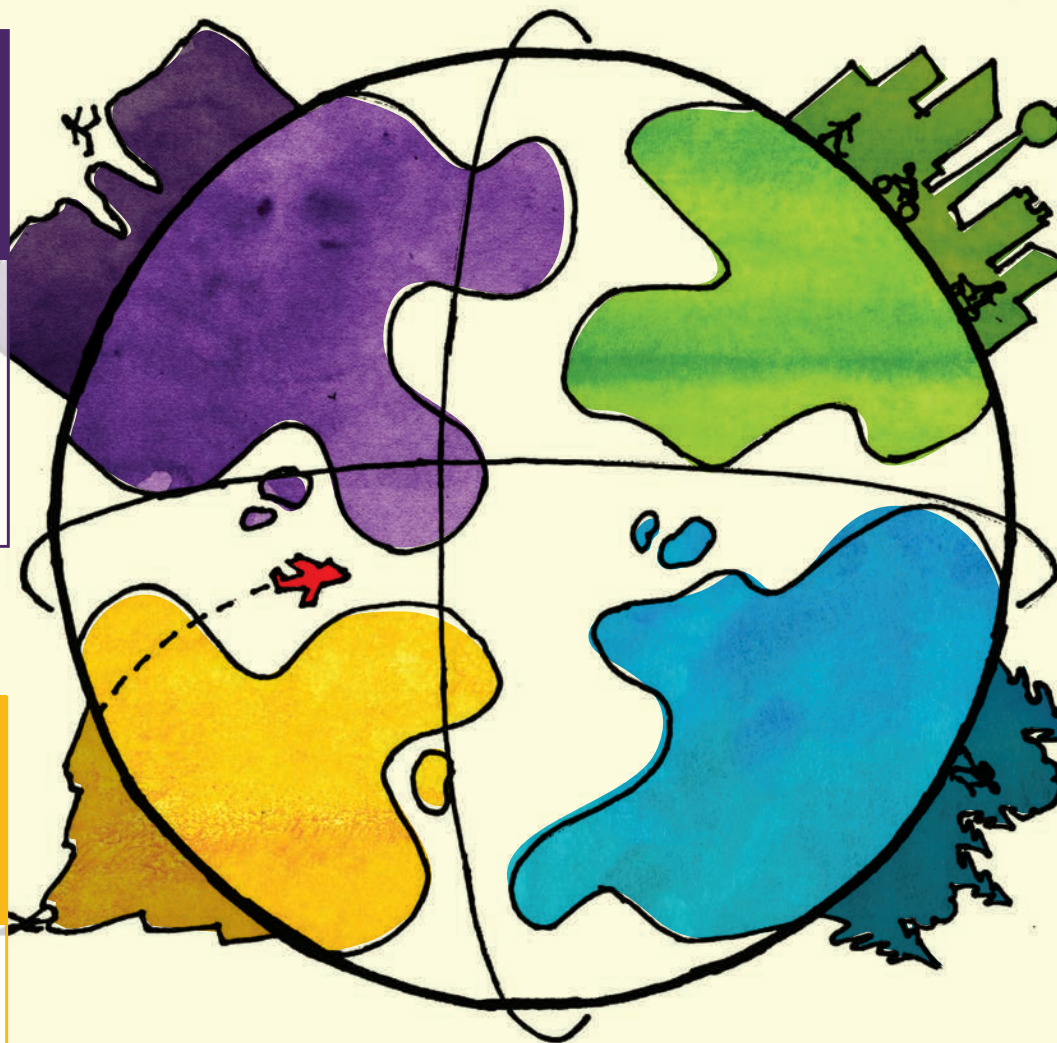
INNOVATION 'DESTINATIONS'

FOUNDATION + FINANCE

- 1 Hidden Levers**
Reconfiguring the infrastructure and building blocks of higher education institutions.
- 2 Radical Affordability**
Reimagining the way that higher education institutions are financed, business models are configured, and students afford higher education.

WORK + WORLD

- 7 Career Crafting**
Preparing students to go into the workforce with a purpose. Iterative, impactful career design.
- 8 Citizen Shaping**
Preparing students personally and professionally as global citizens.



PACE + PLACE

- 3 Changing Paces**
Recalibrating the time it takes to move through higher education, allowing for flexibility in when students start, stop, or revisit their education.
- 4 Changing Spaces**
Rethinking the where and how learning happens to support different types of student learning.

ACUMEN + AGENCY

- 5 Competency-Centered**
Reorienting the student experience around the whole student—the competencies and skills they bring to college, and their learning beyond courses or disciplines. Valuing and measuring their achievements beyond the traditional transcript.
- 6 Agency-Oriented**
Re-centering student agency through personal learning agendas and purposeful learning experiences.

INNOVATION 'DESTINATIONS' & INSPIRATION

FOUNDATION + FINANCE

- 1 Hidden Levers**
Reconfiguring the infrastructure and building blocks of higher education institutions.
- 2 Radical Affordability**
Reimagining the way that higher education institutions are financed, business models are configured, and students afford higher education.

DUKE KUNSHAN UNIVERSITY 1 6 7 8

GEORGETOWN UNIVERSITY 1 7 8

INDIAN RIVER STATE COLLEGE 1 2 3 6

WORK + WORLD

- 7 Career Crafting**
Preparing students to go into the workforce with a purpose. Iterative, impactful career design.
- 8 Citizen Shaping**
Preparing students personally and professionally as global citizens.

AFRICAN LEADERSHIP UNIVERSITY 8 7 3 5 6

BATES COLLEGE 7 8 6

MAHARISHI INVINCIBILITY INSTITUTE 8 7 2 5 6

PACE + PLACE

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GEORGIA TECH 4 1 6 8

MAKE SCHOOL 3 2 7

MINERVA 4 1 5 7 8

UNIVERSITY OF UTAH 4 6 7

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Re-centering student agency through personal learning agendas and purposeful learning experiences.

COLLEGE UNBOUND 6 5 2 3 8

WESTERN GOVERNORS UNIVERSITY 5 1 2 3 4



CASE STUDIES

The 12 examples in this section are a jumping off point for thinking about opportunities for innovation in higher education. They by no means constitute an exhaustive list. They illustrate a range of change processes and innovations that vary in scale. Some are similar to those we imagined in our initial project while others exceed what we imagined, such as using the city as a classroom. They span work happening at the individual level at the fringes of an institution to systemic changes driven by people at the dean or administrative level, and reach all the way to the extra-institutional, where the

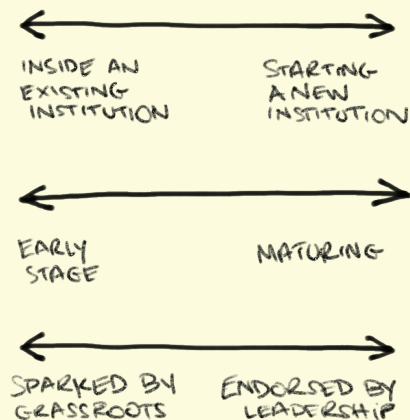
pace of change happens more quickly. We hope they will inspire and stimulate the thinking of leaders and dreamers who are itching to make a change.

The majority of the cases are taken from around the U.S., while we also include inspiration from schools in other countries, including Rwanda, South Africa, and China, which are each facing their own unique set of pressures and constraints. Some are newly launched efforts, and others tell the story of a multi-year process to fundamentally reimagine an entire model.

In addition to representing a wide range of institutions, we focused on examples where we found vivid footprints left by the innovators as they journeyed: the early steps they took, the hurdles they faced, and the insider tips they want to impart to others. This backstory, the *how*, not just *what*, might be the less visible, but more impactful actions of our innovator guides.

Looking outside of legacy institutions yields some radical experiments that can inspire and provoke. These educational entrepreneurs are creating models that fundamentally challenge some of the most deeply held assumptions about higher education.

Innovators working within established structures and institutions also have a lot to teach us about creativity and resilience when initiating new programs and approaches—despite the constraints they may face. Understanding the levers they choose and the student needs they prioritize is useful to everyone striving to improve education.



An inspiring example of systems-level innovation is happening at Arizona State University (ASU). Many people are familiar with ASU generally as an innovator, yet we highlight one of their key mechanisms for change. We focus on how its leadership and others facilitated the creation of the Office of University Initiatives—an ecosystem with extreme results. We highlight a few institutional practices of the *how* that we hope you'll spot in the case studies to come as well.

We also feature one small and scrappy example below, sharing some of the lessons Tom Black and Helen L. Chen have learned in their efforts to implement ePortfolios and other initiatives.

Arizona State University's Office of University Initiatives: From Conception to Implementation

At Arizona State University, President Michael Crow posed the question, "What if universities were as nimble as startups, with the freedom and capacity to explore wild ideas and rapidly advance innovation?"

The Office of University Initiatives (UI) is ASU's answer to this question: an "interdisciplinary team that leverages design thinking, research, and collaboration to rapidly design and launch initiatives"¹⁶ in support of ASU's charter and design aspirations.

In practice, what does this look like? We got into the nitty gritty details with the team that runs UI to understand how it brings countless special projects to completion and institutionalization.

The UI team consists of an Executive Director, Director for Social Embeddedness, 6-8 staff members, a small team of student research analysts, and two to four University Innovation Fellows. Together, they identify new opportunities and spin them out into initiatives.

FLEXIBLE STAFF THAT CAN FOLLOW A PROJECT

The UI Fellowship is the core staffing innovation of the office. UI Fellows serve in the position for 13 months, and are

¹⁶ The Office of University Initiatives. Arizona State University.



central to shepherding UI projects from conception to implementation. They come from a variety of different backgrounds, and in the process learn everything about higher ed administration and ASU.

Fellows are trained in frameworks like design thinking, systems thinking, and futures thinking, giving them a toolkit for tackling the complex projects that come into UI. These fellows predominantly serve as project managers, building and driving UI projects forward. The Fellowship often feeds into permanent staff positions as well, which extends UI's on-campus network, ensuring they have allies across ASU with the skills and mindsets to collaborate on future UI projects and execute them quickly.

Lindsey Beagley, currently the Director for Social Embeddedness, started out as a fellow herself. Acting on one of ASU's university-wide goals to "enhance [its] local impact and social embeddedness," this group encourages faculty and staff to develop mutually beneficial partnerships with a range of partners outside of the ASU community, much like UI partners with external entities for many of its initiatives.

UI catalyzes innovation across the university by giving academic units and other teams timely research, and connecting them to potential internal and external partners. The research team produces Radars, a curation of news articles and other reports on various

DEVELOP PARTNERSHIPS ACROSS AND OUTSIDE THE INSTITUTION

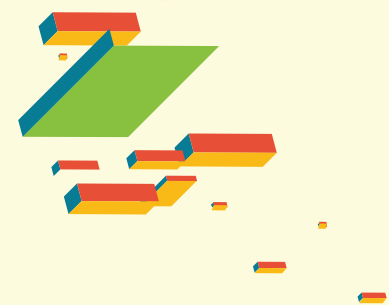
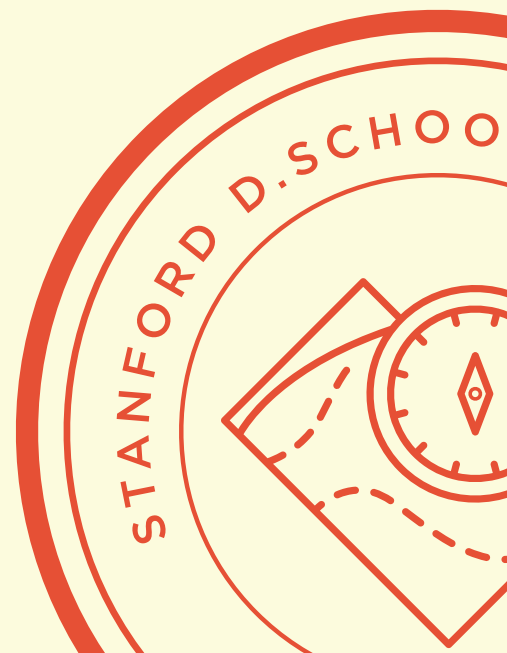
BUILD A CONTINUOUS STREAM OF INSPIRATION

subjects at Michael's request. The team tracks trends in higher ed, online learning, and beyond to help give the UI team and university leadership a sense of what's coming up and to provoke ideas of where else they could innovate. One recurrent Radar is focused on university and global initiatives and another on the future of work and learning.

As a special projects unit purposely designed to sit outside any academic or student service unit, UI is able to rapidly respond to and focus on emerging opportunities or ideas. The team relies on a toolkit of skills and the team's broad knowledge that they tailor to the situation at hand. They work as a startup lab to incubate and advance a variety of projects, as well as designing and implementing projects directly from Michael. UI approaches every initiative with a "yes, and" mindset, which fosters a "how can it work" attitude.

With an entire office dedicated to creating change and implementing special projects through partnerships, ASU's Office of University Initiatives represents an openness to and drive for change embedded into the very infrastructure of the university.

CREATE A SPACE TO EXPERIMENT OUTSIDE EXISTING STRUCTURES



INSIDER TIPS FROM TOM BLACK & HELEN CHEN

Two people who have been a source of inspiration in their iterative and people-centered approach are Tom Black, University Registrar and Assistant Vice Provost at Johns Hopkins University, and Helen L. Chen, Research Scientist in the Designing Education Lab in the Department of Mechanical Engineering at Stanford University.

They are well-versed in the art of navigating ambiguity and tackling complex problems in a low-res and scrappy way. Below are some of their learnings from diving into the unknown in their efforts to introduce and implement ePortfolios, among other initiatives.

Embrace the unknown: “It’s the same as a startup—there are huge highs and huge lows, so you have to realize that your emotions are going to be tested,” Tom says of the experience. “It never goes like you want it. You have to have a very high tolerance for the unknown. And sometimes you don’t have an answer right away and you have to let it sit there and incubate. All of that is part of this process and the person has to be ready for it. After a while, you get better at it and you know what to expect.”

Prototype the model: “There’s much you can do early to test ideas and to dare to think differently—to help people imagine what might be possible,” Helen says.

“The value of prototyping in terms of having those visible prototypes to share is to generate conversations in a way that would be very different if I was just describing this kind of idea in words or text,” Helen continues. “They helped us make an argument for ‘why should we be thinking about this?’, generating conversations and inspiring someone to see possibilities in the process.”



Engage the right team: “You have to convince people to build out something for which there is no roadmap. There are a lot of people who are not very tolerant of the unknown, who are risk averse and don’t like to fail,” Tom says.

“[So] you kind of have to look for the person, not for the position. Too often in higher education we tend to say, ‘we have to be collaborative,’” he continues. “So we look at the administrative structure and say, ‘we’ve got to pick one from here and here and here’ to get good representation. And that’s the worst idea. You do not want to do that if you’re going to be creative, because the fact of holding a specific position doesn’t mean a person is practiced in creative thinking.”

To spot a good creative being, Tom says to look for “enthusiasm, where eyes light up by possibility. They have a curiosity too or desire to be building things. I’ve also done a lot of work with students—they are some of the most creative people.”



AFRICAN LEADERSHIP UNIVERSITY



POINTS OF INTEREST

- African Leadership University (ALU) seeks to develop leaders for the African continent, which will be **the largest workforce in the world by 2035**. It emphasizes developing **student agency over their education as well as project-based learning**. Only 10% of students' learning happens in the classroom—the rest comes from experiences out in the world like internships and real-world projects, allowing students to cultivate 21st century skills and build a network.
- ALU is low-cost and flexible: it hires learning experts who curate educational experiences and mentors who can support students in their projects. The ALU model also relies on **peer and self-directed learning, which shifts the focus from a scarce resource (PhDs) to an abundant one (inspired students)**. Students also finance ALU with income-share agreements, so they pay less up-front for their education.
- The ALU curriculum consists of a leadership core in the students' first year, followed by a **"mission declaration" (rather than a major) in the second year, around which students wrap their course of study**. Students gain a degree in Global Challenges or Entrepreneurial Leadership, while pursuing their mission.



CITIZEN SHAPING + CAREER CRAFTING | CHANGING PAGES | COMPETENCY-CENTERED | AGENCY-ORIENTED

Photo Credit: ALU

YOUR GUIDES



Fred Swaniker
Founder



Akomeno Omu
Curriculum Designer
& Product Manager

Africa will have the world's largest workforce by 2035—outpacing both China and India.¹⁷ African Leadership University (ALU) founder Fred Swaniker sees this as an opportunity to develop three million “game-changing African leaders, innovators, and problem-solvers” who can in turn create opportunities for the rest of the continent's inhabitants.

There's still a challenge though. “We need to have our own world-class universities, but we don't have the money, resources, and time of the rest of the world,” Fred explains. So he decided that it was up to him to “design a new educational model for [Africa's] large, untapped talent pool.”

To do this, ALU needs to be “in the business of developing talent, not education,” Fred says. “Education is a part of developing talent.”

Fred points to data that just 10% of any skill is learned in the classroom. 20% is learned from peers and mentors, and a whopping 70% comes through experience. “We learn best by doing,” he says. “Yet today most education focuses on that 10%—the classroom experience. We wanted to give them the full 100%.”

Students work on real-world projects for organizations from day one and spend at least four months each year in the workplace. “We connect them to powerful networks that allow them to learn.

17 Swaniker, F. (2018, September 12). How to unlock the talents of young Africans. *Gates Notes*.

They practice running real ventures on campus,” Fred adds. “These are just some of the ways in which they learn by doing. This makes them a lot more inspired, and able to operate in the real world.”



ALU STUDENTS IN RWANDA WORK TOGETHER IN CLASS

Photo credit: ALU

Fred's previous educational venture, African Leadership Academy (ALA), demonstrated the potential of unleashing Africa's talent. The two-year program equips Africa's most promising young leaders with Entrepreneurial Leadership, which they bring back to their communities after college. They also become leaders across all sectors, such as business, politics, healthcare, or education.





Many ALA graduates attended college abroad, due to the insufficient seats available at African universities and the general poor quality of African higher educational institutions, Fred notes. ALA also educates only 250 students at a time, which was too small to provide leadership for a region of the world that will house 40% of the global population by 2100. Fred knew he needed to develop a model that could scale.

The emergence of MOOCs and other similar innovations got Fred thinking about innovative ways to achieve his vision. One experiment at ALA proved instructive: students discussed with one another questions about lessons from an online computer science course, creating a peer-taught hybrid class. It became many students' favorite class, demonstrating to Fred the power of self-directed education. He realized that students could support each other peer-to-peer rather than rely solely on the guidance of faculty.

“And that’s when I realized that I’ve been thinking about this whole problem the wrong way,” Fred reflects. “Instead of designing a system around a scarce resource— professors with PhDs— we needed to develop the system around an abundant resource: brilliant students, and flip the focus. And that’s the only way we can achieve high quality, high scale, and high speed.”



THE ALX CAMPUS IN NAIROBI IS DESIGNED TO REMIND STUDENTS OF THE ALU VALUES, INCLUDING BOLDNESS, CONTINUOUS LEARNING, AND INTEGRITY
Photo credit: ALU

Fred notes that when universities were first developed, information was scarce. People needed to go to a university or library to access such information. But now, it is ubiquitous, accessible to many with the touch of a button. Even access to world-class professors is possible through online platforms like Coursera, edX, and Udacity. “Content creation is a waste of time and money. I realized that we didn’t need to be content experts,” Fred explains. “We needed to be learning experts. I assembled a team of folks who really knew about learning and learning design.”




Fred also wants to move away from the current model of universities, which is “built around excluding people.” He wants ALU to massively scale, providing an education to as many as a million students at a time.


ALU now operates its unique approach on two campuses, in Rwanda and Mauritius.

The ALU model includes three key distinctive attributes. First, students learn peer-to-peer and through technology-enabled learning, encouraging the development of agency over their education and the ability to navigate ambiguous challenges.

Faculty act as guides, and much of the student experience is self-directed. In between class sessions, students are encouraged to determine what information they need to learn, discover the gaps in their knowledge, and identify ways to close those knowledge gaps.



“The way we perceive it, the faculty knowledge is not the ceiling but rather the floor to student knowledge—it’s the launchpad,” explains Akomeno Omu, designer of the Entrepreneurial Leadership program in Mauritius.



Secondly, student experience is mission-centric rather than major-centric. The students learn through extended projects, expert interviews, field studies, research, experiments, work experience, and many other ways of ‘learning by doing.’ As Fred says, “the aim is not to impart facts and figures. Instead we aim to create problem-solvers and lifelong learners who can keep this up as the world changes.”

Since 2018, students at the Rwanda campus can get an interdisciplinary degree in Global Challenges rather than a degree in a traditional single discipline like biology. Each student declares a personal mission related to a grand challenge (e.g. climate change, wildlife conservation, governance, women’s empowerment, arts, culture, and tourism) and wraps their education in core subjects like economics or computer science around that mission.

By pursuing an issue that impacts the African continent, the students are better equipped to tackle these challenges, while creating work opportunities for themselves. Agile, problem-solving students who can adapt to a changing world are even more valuable with the rise of automation and artificial intelligence.

Akomeno says that even if students do not pursue their declared mission after graduation, the exercise of declaring one will “shift their mindsets from their degree subject to thinking about the impact they want to have in the world.”

With the world rapidly changing, ALU believes that traditional, rigid degrees are no longer useful. Instead, Akomeno hopes that students will learn to use their unique skill set and what they care about to make a positive impact and “shape their little corner of the world.” It’s about “learning to do things, not just know things,” she says.

opportunities that students can choose to tackle, which include urbanization, education, infrastructure, healthcare, climate change, governance, job creation, agriculture, natural resources, arts, culture & design, tourism, empowerment of women, regional integration, and wildlife conservation.

The structure of the programs means that a student's education is aligned to their passions and interests, allowing them to work at the intersection of multiple disciplines, resulting in higher agency and more motivation to study. Students curate personalized learning journeys in an entrepreneurial and applied way. They start by identifying an understanding of the problem they want to solve, then gain the requisite problem-solving skills, develop innovative solutions, and implementing them alongside others. This process repeats and deepens with increasing complexity, autonomy, and effort throughout their time at ALU.



Finally, ALU has a “pay-it-forward” approach to their financial model, intended to make education more accessible to African youth. Its income-sharing arrangements enable students to graduate without debt—instead they repay a share of their income back to investors after they find a job.

To achieve the goal of scale and accessibility, Fred and his team are exploring models to get costs as close as possible to what they have found the average African can afford: \$1,000 per year for university.¹⁸

Their response is ALX, a learning platform and community that offers an even lower cost model than ALU. The ALX program is a non-accredited, lifelong learning approach to leadership development, and is rolling out in cities across Africa,



ALX YOUNG LEADERS COLLABORATE ON A PROJECT ON THE NAIROBI CAMPUS
Photo credit: ALU



ALU STUDENTS IN MAURITIUS WORK ON A DRONE BUILDING PROJECT IN THE ENGINEERING LAB

Photo credit: ALU

starting in Nairobi. One aspect of the ALX community is six-month courses that are designed for university graduates and experienced workers to gain leadership and 21st century skills intended to make them more employable.

The program costs under \$2,000. However there is an income sharing agreement model available to students, which allows them to enroll without paying any money upfront. Students pay a fixed percentage of their income back to ALX over the course of five to ten years instead. If they remain unemployed, they will not owe anything. In this framework, the income share agreements are more like an equity investment in a student's future rather than debt they must pay back no matter what.

¹⁸ ALU research based on data from the Ministry of Higher Education and other sources.

Getting such unique programs off the ground required creative thinking on Fred's part. To give ALU credibility, Fred partnered with a Scottish university to get accredited. However, regulatory requirements and the residential campus in Mauritius made the model cost far more than Fred intended. Accreditation also limited some of the innovation he intended to implement.

The process also attracted staff who didn't align with Fred's vision. "The people who joined us were not interested in doing unconventional things," Fred says. They thought that ALU would be the "Harvard of Africa."

"We had hired people based solely on their skills, rather than also considering their values or beliefs," he continues. So in 2018, five years into the journey, they dismissed close to half of the staff who weren't aligned with Fred's innovative, disruptive vision. Fred says he'd "rather

fail at achieving something extraordinary than achieve something ordinary." Finding staff open to challenging convention continues to be one of the biggest obstacles ALU faces.

Following these hurdles, Fred is reconsidering accreditation—he hopes eventually to move away from it entirely. But in the meantime he has launched other programs to develop leaders, such as the lifelong learning approach at ALX.

Fred and the ALU faculty and staff have begun to see the fruits of their labor: in June, the inaugural class in Mauritius graduated. To date, ALU students have secured 900 internships in over 200 companies across 30 countries in Africa and beyond—starting on their journey to becoming "ethical and entrepreneurial leaders for Africa and the world."

INSIDER TIPS

Building ALU has been a challenge for Fred, not least because he sought to create something unlike the traditional universities we see around the world today—with fewer resources. Over the last four years, he has identified a number of key elements that enabled the successes he's experienced so far.

Prototype the model: In the early days, ALU ran one-month learning labs, which simulated their educational philosophy and enabled the faculty and staff to test whether students could adapt to the ALU model, while also identifying the technological and extracurricular support systems that could be used to bolster student learning.

The biggest insight from the labs was that students could adapt to this new way of learning, but they needed an intentional induction period to catalyze the mindset shift. The impact of the learning labs is still felt at ALU today, as it shapes how incoming students are inducted into the ALU community during the orientation period, as well as the use of technology to support student learning.

Engage the right team: Over time, Fred realized that he needed to think differently about who to have on his team. The most successful hires came not from academia or a traditional education background, but outside of it—people with unconventional backgrounds, who have “real world experience, who can actually think differently,” he says.

“If you start with people who have only seen the status quo, you’ll end up with the status quo,” Fred explains. It’s not enough for these individuals to simply be outsiders—they have to be sitting at the table, fully committed to creating something entirely new.

With the right people in place, Fred and his team were ready to depart from traditional academia and then bring it back in later. “If you go for that crazy idea, you can kind of walk it back [after].” Imagination and passion aren’t enough though. To be an educational entrepreneur like he is, Fred found that resilience and courage are the two most important qualities to keep going.

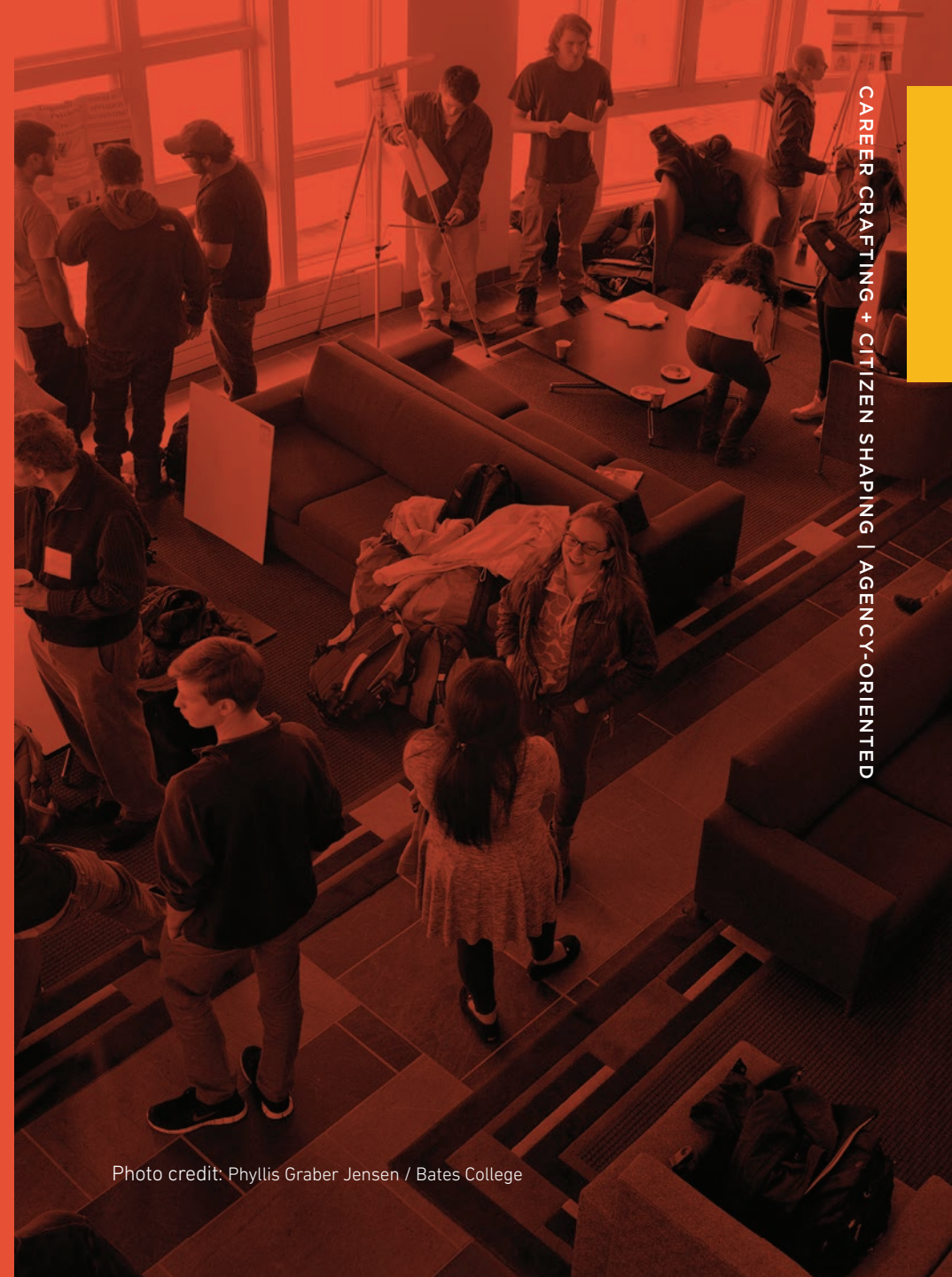


BATES COLLEGE



POINTS OF INTEREST

- Purposeful Work at Bates provides a **purpose-focused student experience, both in the academic and co-curricular realms.** Students consider questions such as “What do you care about?” and “What will you try next?” while developing tools for life-long learning and continual self-discovery.
- Included in Purposeful Work are curricular structures to support career and purpose learning, such as courses like “Life Architecture,” **curricular infusion models, Practitioner-Taught Courses, and Purposeful Work Internships and job shadowing.**
- In addition to providing students with career readiness and purpose learning, Purposeful Work is an important dimension of the Bates College equity promise—providing **paid internships and other exploratory experiences.**



CAREER CRAFTING + CITIZEN SHAPING | AGENCY-ORIENTED

Photo credit: Phyllis Graber Jensen / Bates College

YOUR GUIDES



Clayton Spencer
President



Allen Delong
Senior Associate
Dean for
Purposeful Work



Rebecca Fraser-Thill
Director of Faculty Engagement
and Outreach for Purposeful
Work and Visiting Instructor
in Psychology

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Clayton headshot: Phyllis Graber
Jensen / Bates College
Allen headshot: Ivy Pelletier
Rebecca headshot: Rebecca Drouin

In today's rapidly-changing world, the notion of 'career' has dramatically evolved, from entering a job at a company where you might expect to remain for years, if not a lifetime, to a much more dynamic process. The average college graduate can expect to have more than 11 distinct jobs before the age of 50—many of which don't yet exist.

This new reality, coupled with Bates College President Clayton Spencer's own significant career pivots early in her work life, inspired the focus on Purposeful Work seen at the college today.

Clayton's initial chosen career path of litigation turned out to be a mismatch in preferred skills "because litigation is always about past events" while she is "fundamentally an institutional person, a team builder, future-oriented, and optimistic." In her early forties, Clayton took the plunge and made a career switch into higher education, a decision she said "changed her life." Now as President of Bates, she seeks to afford every student the opportunity to find a meaningful match between work and their unique talents.

According to Clayton, "one of the strongest motivators in human life is a search for meaning or purpose." Research backs this up. Young people find it increasingly important to derive a sense

of purpose from their work, but about half of college graduates struggle to find it, according to a recent Bates/Gallup study.¹⁹

Therefore, students need agency and adaptability to create individually-defined, purposeful career paths and to navigate today's increasingly complex world. Higher ed institutions can help.

With that perspective in mind, Clayton's objective became "loading [the students] with the software that lets them become agents in creating a meaningful and economically viable life." At Bates, this means equipping students with the tools to continually iterate along their path to create a sustaining and fulfilling life that also has a meaningful impact beyond themselves.

¹⁹ Bates/Gallup. (2019). *Forging Pathways to Purposeful Work: The Role of Higher Education*.

Purposeful Work factors prominently in this endeavor. The faculty and staff at Bates work with students from the moment they set foot on campus to identify what brings them meaning, so that they'll have the mindset and skills to continue to do so over the course of their lives. "They are most likely to find meaning and purpose if what they do is related to their interests, values, and strengths," Clayton explains. The college prioritizes providing all students with equal access to the tools that do just that, along with a range of work experiences, including funded internships.

Students are encouraged to discover and develop these interests through trial and error, gradually determining what "purposeful work" means to them. It's not about knowing or picking the 'right choice,' but rather following various points of interest and seeing what creates a sense of engagement and impact.

Clayton decided to bring the concept of 'purposeful work' into the fold of students' education within a year of becoming the President of Bates. The idea was to start small: she brought together faculty and staff during two informal, open lunches to discuss the idea. There, she identified the people who seemed interested and well-equipped to take on the challenge and then formed a working group in May 2013.

The working group was co-chaired by faculty and drew from all parts of the

college, including faculty members from a number of departments; staff members from Admissions, Career Development, and Student Affairs; and students from all class years. The group reported back in August 2014 with an articulated philosophy that defined Purposeful Work at Bates and a set of pragmatic tactics to pilot. The initial tactics included introducing five Practitioner-Taught Courses during a Spring mini-semester known as Short Term, a grant to incorporate "purposeful work" into the academic curriculum, and the development of an internship program.

Practitioner-Taught Courses (PTCs; see At A Glance section for explanation) posed a unique challenge: how would faculty feel about non-faculty members teaching credit-bearing courses? To preempt any roadblocks, administration devised two solutions: first, a tenured faculty member would lead the design and initial implementation of the PTC pilot.

Second, alongside these PTCs, the college introduced the concept of allowing five academic faculty to use Short Term to design or redesign courses for the regular curriculum. Redesign faculty select a small team of students who have taken at least one of their classes to work with them in Short Term to design a new syllabus, create classroom or homework assignments, and serve as a constant focus group in the development of a new course. Because they earn teaching credit for the course redesigns, faculty are able

to make significant curricular innovations without losing precious summer research time. The bundling of the PTCs and redesigns allowed Practitioner-Taught Courses to take place, while making space for a desirable outcome for faculty as well.



**STUDENTS IN THE MUSIC PRODUCTION
PRACTITIONER-TAUGHT COURSE
HAVE HANDS-ON STUDIO TIME**

Photo credit: Josh Kuckens / Bates College

Once the working group concluded its efforts, Clayton strategically held Purposeful Work in the design space—separate from existing programs and offices on campus—for three years to develop the programming, develop and refine the pilots, build momentum, and continually assess to see what was and wasn't working.



**URBAN PLANNING PRACTITIONER-TAUGHT COURSE
SETS UP A PUBLIC BIKE LANE DEMONSTRATION**

Photo credit: Josh Kuckens / Bates College

The initial design team was limited to a few individuals whose work was funded by start-up money raised from Trustees and alumni. Only once Bates had a set of functioning, well-tested programs did they hire Allen Delong to be the Senior Associate Dean for Purposeful Work. Allen then integrated Purposeful Work programming with the existing career development center to create the Bates Center for Purposeful Work.

“Purposeful Work had been insulated on campus in the design space intentionally,” Allen explains. “And then it was time to integrate both the philosophy and the programs into the work of the college; that was my priority.”



AT A GLANCE:

PURPOSEFUL WORK AT BATES

PURPOSEFUL WORK INFUSION PROJECT

The Purposeful Work Infusion Project gets faculty members talking explicitly about meaning, purpose, work, and careers in their classes through discussions and reading and writing assignments. This is achieved via “curricular infusion,” a pedagogical approach in which key topics are interwoven into course material in a seamless manner.

PRACTITIONER-TAUGHT COURSES

Practitioner-Taught Courses (PTCs) are credit-bearing classes offered during Short Term on skill-based topics outside of the existing Bates curriculum, such as music production, entrepreneurship, and science journalism. The courses are taught by alumni and friends of the college rather than by faculty members. Students who take PTCs get to test out an area of interest, gain a set of tangible skills, and form a professional network through their instructor, guest speakers, and field trips.

LIFE ARCHITECTURE

Bates also offers a class specifically focused on purposeful work, called “Life Architecture,” which is offered during Short Term. Drawing on the ideas found in books such as *Man’s Search for Meaning* and *The Defining Decade*, and lessons

from design thinking like those offered in *Designing Your Life*, the students learn the tools they need to bring meaning and purpose into their lives. The class incorporates four different threads. The first, plant yourself, is about evaluating one’s values, interests, personality, and strengths. The next is about what really matters, looking at meaning and purpose in the context of life. The third is about creating a network and crafting a job, and the last looks at practical matters, such as preparing your taxes and making and maintaining friendships.

BATES CENTER FOR PURPOSEFUL WORK

In addition to typical career development services, the Bates Center for Purposeful Work offers two unique programs:

First, the Purposeful Work Internship Program offers two routes to gain a summer internship: through the core employer program, a set of organizations that prioritize hiring a Bates student for the summer, or by applying for funding for an internship a student finds or creates on their own. The Program is anchored in the Bates equity promise and seeks especially to help students who arrive on campus with less developed social and professional networks, often

those on financial aid or first-generation college students.

Bates raises \$350,000 in annual funding to support students who are doing Purposeful Work Internships, allowing them to pursue these opportunities without foregoing a salary. The Program includes preparation, ongoing reflection, a virtual cohort model, and a requirement to present in the fall after their internship, driving home key elements of the design thinking process.

Second, the Purposeful Work Job Shadow Program allows students to test out career paths by shadowing professionals in various careers and incorporates reflection and iteration into the model, using the Purposeful Work philosophy. Bates offers close to 1,200 opportunities, most of which last a single day, but can go up to five. Students can participate in up to three job shadows each year over the course of their four years at Bates. Job shadows inform students’ internship choices and give them a better idea of what they do and don’t want in a job at Bates or after graduation.

What does purposeful work at Bates look like in practice?

There are a number of components: the Purposeful Work Infusion Project, Practitioner-Taught Courses, and the Bates Center for Purposeful Work, which includes Purposeful Work Internships, a Job Shadow Program, and the Spotlight on Career Series.



PURPOSEFUL WORK INTERNSHIPS

Photo credit: Bates College

The most broadly diffused effort is the Purposeful Work Infusion Project. The model gives faculty the freedom to inject “purposeful work” into their curriculum in their own way. The only constant is that they talk about work, meaning, purpose, and careers as it fits within the context of their course, and also require a reading and a writing assignment on the topic.

“The prerequisite,” explains Rebecca Fraser-Thill, Director of Faculty Engagement and Outreach for Purposeful Work and Visiting Instructor in Psychology, “is that you have to be willing to allow faculty autonomy. The challenge with curricular infusion is that the faculty members will all do it slightly differently, which is actually the beauty of it.”

The Project started with a pilot of five faculty members from different disciplines. As of 2019, 46% of faculty—from every department and program at the college—have been involved.

Through all of these initiatives that comprise Purposeful Work at Bates, students are encouraged to break out of what Rebecca describes as an ‘identity-foreclosed mindset’ and craft work that has a purpose. Identity foreclosure, Rebecca explains, is “making a decision about one’s direction without adequate exploration.” Such a person is likely to choose “the most obvious path for them, often because they’ve seen parents or relatives doing the work, and/or because society often mentions the profession.” When the goal is breaking out of an identity-foreclosed mindset, going to college becomes about much more than simply choosing a major, taking some classes, and getting a degree. Students try out interests, reflect on their experiences as they make decisions, and refine their choices in an iterative process.

The efforts have paid off: Jake Atwood, a student who graduated from Bates in 2019 and took a handful of Purposeful Work infusion courses, says that “Purposeful Work has changed the way I think about the world and my life every day.”

Rebecca Bassell, a 2016 graduate, agrees. “Purposeful Work specifically forces you to examine how what you’re doing in the classroom can apply to something real. And the biggest difference I’ve seen is, I think a lot of Purposeful Work kids feel a bit more empowered.”

“What I love about the program is that they’re not holding your hand,” she adds. “What they’re saying is, you are getting this practical experience—value that experience for what it is right now, understand the value of how that applies to the classroom and what you’re learning. If you can synthesize that, and get ready for the jobs that aren’t even created yet, that creates the strongest future candidate.”

Creating meaningful contributions to society hinges on knowing how to create purpose in work based on one’s unique interests, skills, and values. Learning how to do this while navigating the college experience prepares students for the ambiguities of life post graduation.

“We all have moments when we know we’re off-target,” Clayton says. “Offering a toolkit for every time our graduates are going through the re-exploration process will support them as they define and iterate along their own unique path.”

HOW DOES BATES THINK PRACTICALLY ABOUT PURPOSEFUL WORK?

CURRICULAR	CO-CURRICULAR	WORLDS OF WORK
Practitioner-Taught Courses	“Unplugged” Speaker Series	Roadshows
Purposeful Work Infusion Project	How to Adult Life Skills Series	Purposeful Work Job Internship Program
Life Architecture Course	Bobcat Ventures Entrepreneurship	Spotlight Series



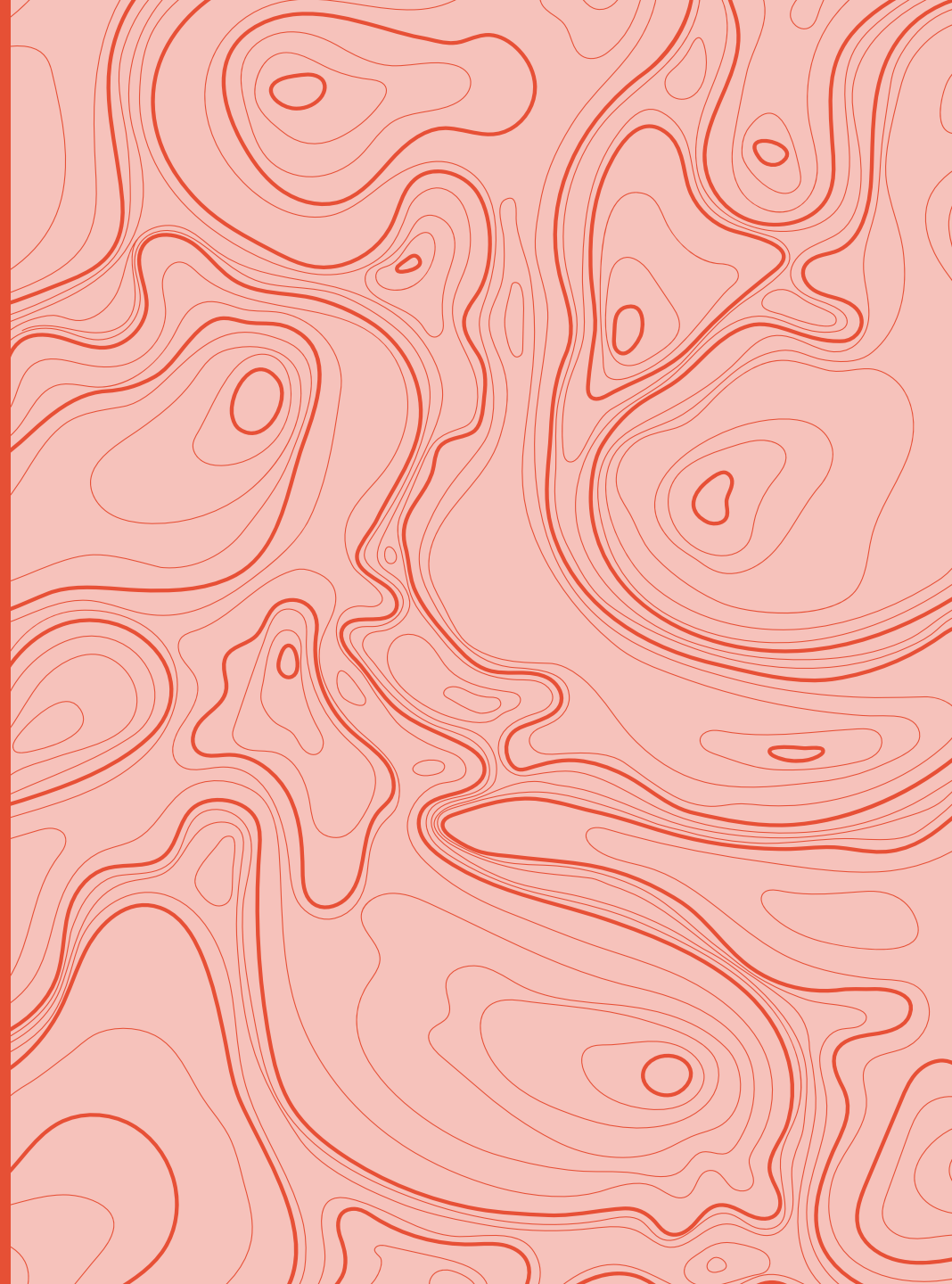
INSIDER TIPS



Start small: Despite the blessing from leadership in Bates' case, portions of the Purposeful Work initiative started small and scrappy. For the Purposeful Work Infusion Project specifically, all it took was five faculty members who were willing to try something new.

Engage the right team: To identify those early participants, Rebecca remembers that the Dean of Faculty told her to look for the "people tapping their toes around the edge of the dance floor." She looked for the people who appeared open to pedagogical experimentation by demonstrating their interest or capacity for it in the past. Ideally, she says, these people are known on campus and have some gravitas "so that they can spread the word." They also built a pilot team from different departments in the college and from different stages of faculty members' careers.

The five met twice a semester to check in and compare notes about what they were trying. While they bounced ideas off each other and had shared expectations of what it meant to "infuse," each faculty member was given near complete autonomy on how they wanted to put the curricular infusion into practice in order to blend it best into their own curriculum.



COLLEGE UNBOUND



POINTS OF INTEREST

- College Unbound (CU) is a **degree completion college focused on the adult learner**. In the words of CU's Provost, Adam Bush, that can be anyone "who doesn't define their full identity as being a student. They're fitting 'student' into their lives."
- CU's curriculum is adaptive to the learner. All students earn a Bachelor's degree in Organizational Leadership and Change, and their curriculum features student-centered, collaborative learning through **student-driven, long-term projects, competency-based learning, and flexibility**.
- Equity is at the foundation of the CU student experience. Child care and meals are available for each class, and the cost of the degree is kept low. **Students can also count their prior learning towards degree progress.**



AGENCY-ORIENTED + COMPETENCY-CENTERED | RADICAL AFFORDABILITY |
CHANGING PAGES | CITIZEN SHAPING

Photo Credit: CU

YOUR GUIDE



Adam Bush
Provost

College Unbound (CU) started as “a nonprofit with a funky curriculum seeking out schools that would provide degrees for our student body.” When Adam Bush and Denis Littky founded it in 2009, they thought they would serve rising high school seniors like any other more traditional college.

That’s what they did for the first few years. Then something unexpected happened: adults started seeking out College Unbound. The response was astounding and they realized it was time to pivot CU’s focus.

CU is a degree completion college targeted at adult learners. Adult learners doesn’t just mean ages 25 and up, though. “It’s not an age thing,” Adam explains. It’s “someone who doesn’t define their full identity as being a student—they’re fitting ‘student’ into their lives.”

CU is similarly fitting itself to the demand of its students. The curriculum is adapted to them and their needs, meaning that it is truly student-centered. The students learn collaboratively, driving themselves in a



TOM NORTON LEADS A FINANCIAL FITNESS WORKSHOP FOR GRADUATING CU STUDENTS

Photo credit: CU

three-credit semester-long weekly lab where they workshop their projects with a team of peers and faculty. The support they receive is also non-traditional: while it comes in part from faculty advisors, it is also from peers and industry mentors.

Because many of the students at CU are working adults, the institution takes their needs into account, such as having full-time jobs, children at home, and other considerations. Child care is available to all, meals are offered during class, and courses are held in the evenings, or whenever best suits the students’ needs and schedules.



As Adam puts it, any given class starts with dinner. “Dinner’s not a pre-class thing to get you ready—breaking bread together and sharing who you are and what you care about is a part of what class is and a part of what you are getting credit for.”

So what do CU students actually learn?

The college currently offers one degree, a BA in Organizational Leadership and Change. It is an umbrella major that provides “the excuse to do the thing you want to do,” Adam says. Every student is required to come in with or develop a real-world project that guides their learning and curriculum.

Lauren Roy, a student who graduated in June 2018, has a background in sex education and intersectional feminist theory. She was working at a children’s advocacy center, dealing specifically with teenage girls who had been through sexual violence. “I wanted to create some sort of book that would be useful to place their trauma in context in a way that was understandable for kids,” she explains.

So she formed a collective of women who had all experienced gender-based violence and sexual trauma and created a zine. Eventually, Lauren combined this work with an independent study in dance, which “became very therapeutic” for her. Each component of Lauren’s work counted toward her degree.



AT A GLANCE: LEARNING AT COLLEGE UNBOUND

WORKPLACE AND WORLD LAB

Students are admitted into a cohort when they start at CU. Every cohort attends a ‘homeroom’ lab course, called “Workplace and World Lab,” which has its own lab faculty.

“Think of it as a PhD cohort for undergraduates,” Adam explains. They meet once a week and follow a flexible syllabus that includes a core curriculum, which adapts to the students’ projects, as well as readings and guest lectures. During the meeting, students “bring their full selves into the space” and discuss and workshop the real problems they’re tackling. The lab is worth three credits and runs every week of the semester throughout a student’s time at College Unbound.

WEEKLY ONE-ON-ONES

Students enroll in at least one online class each term, chosen from a range of core courses that comprise the general education requirements. They can take an elective course as well. Students also have a weekly one-on-one with the lab faculty, which professors use to ensure that the syllabus is “being designed with students as it’s happening.” The idea is that professors will teach the class to address what the students need.

BIG TEN COMPETENCIES

Beyond this, CU helps its students develop what it calls the “Big Ten” competencies: intercultural engagement, critical thinking, problem solving, accountability, collaboration, creativity, reflection, resilience, advocacy, and written, oral, and visual communication. Students explore and develop these competencies with guest speakers, activities, and discussions, and regularly document and assess what they’ve learned.

PERSONAL LEARNING PLANS

Most of the learning that takes place at CU is self-directed. Each student builds a Personal Learning Plan (PLP) with input and feedback from their personal learning network, which is comprised of a professor mentor, their peers, a field expert, and their academic advisor.

Every eight weeks, students participate in learning exhibitions, present their progress on their projects, and receive feedback.

LEARNING IN PUBLIC

CU has its own version of an independent study, called Learning In Public (LIP). The idea “evolved from feeling like students weren’t getting enough credit out of the projects they were doing out in the world,” Adam explains. At the end of the first semester, students submit a project proposal, as if they are declaring an independent major. As the project evolves, they can propose LIP experiences to drive their project’s development forward. A

faculty committee reviews and assesses these proposals and submitted work to ensure that the student’s learning objectives are met. Ultimately, students can gain from one to three credits in any semester.

For example, if a student has to present on an issue they care about to city council, they can present the faculty committee with an idea of attending the next five city council meetings, writing a talk about it, delivering the talk, and then debriefing it. It gives students the opportunity to learn outside of their regular classes. It is what Adam calls “living the ethics of participatory action research.”

More than creating a college, Adam is “trying to create a higher ed infrastructure to value and honor learning where it takes place.” Learning isn’t something that takes place only in classrooms.

“[Learning] happens all the time, really deeply,” Adam says—in our communities, at work, within a family. Adam sees it as CU’s job to help students “understand that the work they did outside of the classroom has value and should have credit associated with it.”

Many incoming students were passed over for jobs or didn’t feel recognized in other educational contexts, so CU finds ways to give credit for non-academic learning. Every student does a Prior Learning Assessment (PLA), which helps them “learn how to document learning outside of the classroom.” Students can demonstrate this through a variety of means, such as a written portfolio or an oral defense. It becomes part of what Adam calls the “unlearning process.”

Traditional institutions don’t value the diverse realms in which people learn, as they are “built around the campus experience, a holy space of four-year

retreat from the world,” Adam contends. He thinks that students should instead “be in control of their learning in different ways, not step away from that to get recognized.”

Reaching this point has been challenging for College Unbound—and the work still isn’t done.

When they first started in 2009, CU focused on 18-year-old, first-generation college students. Ten students lived and studied together in a house in Rhode Island while doing part-time internships. They were simultaneously enrolled at a regionally accredited university, and graduated with Bachelor’s degrees in 2012.

But when adults began to express interest, CU hosted an open house for these adult learners, which they shared as an event on Facebook. Seventy-five adults showed up the next day. Many of them had begun a college degree program at some point previously, but were unable to finish and never found a program that fit their needs later on. During the open house, they discussed what an education for them might look like, including how to complete their degree without sacrificing time or their existing jobs. Twenty-five of the students who showed up at the event enrolled that fall.

Now students at CU range in age from 19 to 60. Some are unemployed or



underemployed, while others have a full-time job. They span a wide range, such as a Vice President of a community organization, a Founder, people in mid-level positions, and those who don't even know what field they want to go into.

“I had been trying to finish college for 25 years,” explains Kofi Baffour Mireku, a student who graduated in June 2019. There was “always a situation that was keeping me from college,” he notes. “I figured that I would just keep trying.” With CU he “took a chance,” but looking back on his education, he notes that “project building and collaboration has made [him] feel extremely confident about [his] interpersonal skills and ability to build projects out of thin air and connect things.”

Unlike other higher ed institutions, CU recognizes that 75% of college students have at least one characteristic that we might typically associate with a non-traditional learner. “Too often, schools are set up to support students of privilege, from 18 to 22,” explains Adam. “Then they shoehorn others in as money makers to support the campus.” CU thinks about these ‘others’ as precisely the ones who should drive what college could look like.

In the years since its founding, CU has partnered with a number of other institutions. At each point, however, there was a “tension and friction of where institutions could and couldn’t change. It made it clear that we had to be in control,” Adam explains. They were told “numerous times that College Unbound wouldn’t—or couldn’t—exist” by everyone from the state to partner institutions.

Part of CU’s response was “relentless persistence,” Adam says. “Those commissioners leave. Those college presidents leave. And we are still here.” They also had to believe in their own philosophy, trusting that it served its audience.

“A lot of it is being patient for the world to catch up to where you’ve been. Ten years ago, this couldn’t have happened. Now there is a growing understanding of the need for the social justice imperative for higher education to be different and authentically support adult learners in the world,” he says.

That’s why in 2015 CU worked to get approval from Rhode Island as the 13th postsecondary college in the state and why in January 2016 it enrolled its first cohort independent of partner universities. CU is currently in candidacy for accreditation as a degree completion college.

Getting accredited isn’t easy. The peer review process is challenging, and Adam notes that even surpassing the threshold to be able to “be in the room” with other colleges has been difficult. He hopes the payoff will be worth it—“students will see how serious we are about their education,” enabling them to gain access to Pell grants for example, or apply for a graduate program without the challenge



OPENING DAY OF COLLEGE UNBOUND, JANUARY 2016 WITH JAMIE MERISOTIS OF THE LUMINIA FOUNDATION
Photo credit: CU

of convincing the school that CU offers a fully functional BA degree.

While there is still work to be done, Adam has already had the satisfaction of seeing graduates empowered to go after a promotion or pursue a new career. Many of them had previously been “told they’re not smart, or were passed over for jobs because they didn’t have a bachelor’s [degree].”

“Higher ed needs to be an advocate for that learning, not draw a distinction.”



INSIDER TIPS

When Adam started building College Unbound, he drew inspiration from his background as a jazz historian. Jazz comes from a place of collaboration and relies heavily on improvisation—two components he found to be crucial in creating CU.

Question assumptions: Reliance on improvisation has informed CU's process of questioning the default assumptions of an institution. CU doesn't take for granted that a higher ed institution already best addresses a student's needs—it questions these assumptions, considering whether, for example, tuition support and scholarships can help adults learn about budgeting and financial fitness in a way that helps them in more ways than just paying off their student loans.

Take a systems view: Looking at the accreditation process specifically, Adam notes how it helps "build supports and structures that didn't exist before because they didn't have to." For instance, while CU hopes to approach the creation of a Financial Aid Office or Registrar's Office differently than more traditional institutions, it is equally important—and necessary—to do it well. To get that done requires "a supportive team, persistence, and a sense of improvisation."

Co-design with students: Ultimately, CU sees every student issue and curricular change as being one "that's not just a one-off but a chance to examine a system of institutional effectiveness." And students play a crucial role in this—they participate in building the institution. "A culture of change needs to be a collaborative one," Adam notes, "and students are the ones most closely connected to understanding what higher ed structural problems most affect them—and where the solution lies."



DUKE KUNSHAN UNIVERSITY



POINTS OF INTEREST

- Duke Kunshan University (DKU) is a partnership between Duke University and Wuhan University in China, situated as an incubator for innovation that Duke and other universities can learn from. It also offers offers **dual degrees, through a global lens.**
- DKU follows **seven animating principles for curriculum design:** rooted globalism, collaborative problem-solving, research and practice, lucid communication, independence and creativity, wise leadership, and a purposeful life.
- The **curriculum is unique: it is shared, integrated, flexible, and immersive,** and all students are expected to develop a signature project across three years.



Photo credit: Duke University

YOUR GUIDE



Noah Pickus
Associate Provost,
Dean of Undergraduate Curricular
Affairs, and Faculty Development

Photo credit: Duke University

Build a new university in a new century in a new country? That's what drew Noah Pickus into helping launch Duke Kunshan University (DKU). "The chance to re-imagine undergraduate education by designing a curriculum and hiring faculty from scratch had me hooked from the start," he says.

While Duke Kunshan University in Kunshan, China grew out of an initiative by Duke University's business school and first launched in 2014, it quickly evolved into a more comprehensive global educational platform. Starting with small Master's programs and an experimental study away option, the initiative morphed into a focus on a unique undergraduate liberal arts program. The formal undergraduate curriculum launched in the 2018-19 academic year.

As more and more American universities have opened satellite campuses abroad in the last decade, what sets DKU apart is its curriculum and its independent governance.

Those who study at DKU can get a degree in a wide range of majors, such as Ethics and Leadership, Global Cultural Studies, and Material Science. The most unique component, however, is the way courses are structured and taught.

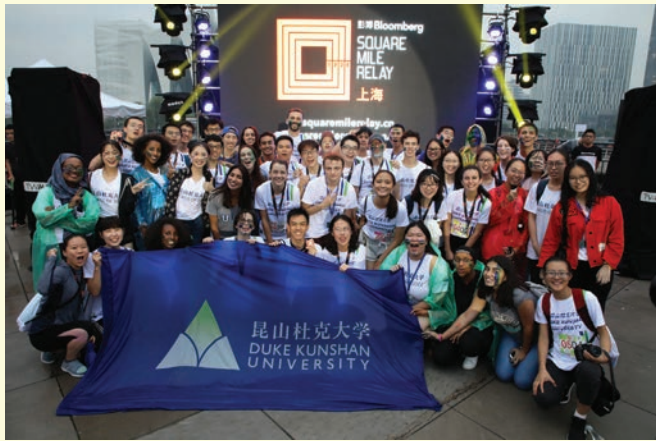
"There is a shared dimension to the curriculum," Noah Pickus, Associate Provost at Duke and Dean of Undergraduate Curricular Affairs and

Faculty Development at DKU, explains. Each student takes three core courses—but "they take them vertically rather than horizontally." Instead of encountering fellow students in required core curriculum classes only in the first or second year, students have a common experience throughout the duration of their studies.

The first course is called "China in the World," which looks at the place where students are studying. The second is about Global Challenges in Science, Technology, and Health, which explores a number of today's challenges, ranging from the environment to energy and health, and how developments in science and tech have helped address them. Finally, the third course looks inward at ethics and citizenship—at a student's own sense of purpose and vocation.

Students also take only two courses at a time, in a seven-week intensive format. "Instead of the usual way, where you take four courses over 14 weeks, the design here is based on the idea that a more modular structure focuses faculty and students on what really matters, on active comprehension rather than passive delivery of content," Noah says. This more 'immersive' experience deters multitasking and enables students to engage more deeply in their studies.





DKU STUDENTS, FACULTY, AND STAFF PARTICIPATE IN THE BLOOMBERG SQUARE MILE RELAY IN SHANGHAI

Photo credit: Noah Pickus

This requires a shift for faculty as well, pushing them to teach “what students need to learn in a new environment and how best to meet that need,” as opposed to what they know, Noah adds. Taking multiple classes at the same time over a typical semester is not necessarily the “best mechanism for learning.”

“[So] we need faculty to be learners as well as teachers in terms of their approach to the modular, intensive structure, the aspiration to connect content to key principles across the curriculum, and by paying attention to the cross-cultural dimensions of good teaching and learning,” Noah says.

The curriculum is also entirely integrated, which means that DKU doesn’t have any departments at all—all of the majors are interdisciplinary. At times they’re a hybrid within one overarching discipline, such as Material Science, which draws on both physics and chemistry. More often, they “cross over two or three divisions of knowledge,” Noah says, such as Global China Studies, which draws on history, philosophy, religious studies, politics, and economics. And majors that integrate the natural sciences, social sciences, and humanities are on their way. The interdisciplinary curriculum organizes a student’s education around the way scholars and practitioners actually work today.

“We have inherited this idea in higher ed that natural sciences, social sciences, and humanities are distinct enterprises,” Noah continues. While there is a virtue to expertise, DKU emphasizes that “the ability to integrate knowledge and work across fields is more important than memorizing information that is already available on your phone.”

Students can take electives like they would at another university, but the system is more flexible. “We don’t have a matrix or a menu,” Noah says, “we don’t constrain that choice.” Once students have completed the structure that the faculty have designed, they can use their electives to go deeper into a specific topic area or learn something that might connect in unexpected ways.

Every student's education culminates in a signature project. Borrowing from AAC&U's LEAP challenge, "it's the simple idea that every student should engage in an individual, meaningful project that is developed over three years rather than only in their senior year," Noah explains.

“[Students create] some kind of creative project that captures within it the knowledge and experience they've gained in and out of the classroom,” ranging from a history thesis to a play or a new app. The idea is that they demonstrate everything they learned over the course of their degree through their project—rather than simply through the grades that appear on their transcripts.



AT A GLANCE: DKU'S SEVEN ANIMATING PRINCIPLES

Most countries in the world build higher ed systems to meet national, political or economic needs. In recent decades, many Western countries have come to emphasize global rather than national citizenship. DKU highlights “rooted globalism” instead as the first of its seven animating principles. This principle equips students to navigate both the opportunities and the tensions between the national and the global.

“At the heart of the enterprise is the idea that we aren’t developing citizens for China or the U.S., nor are we imagining this is a global cosmopolitan project where people have no connection to where they’re from,” Noah says. “We’ve put at the core of our curriculum a question, perhaps even a tension or a paradox—how is it possible to live

in a world with competing claims and commitments?”—and charged the students with working out their own answers.”

DKU’s seven animating principles are reflected in the comparative study of cultural traditions, team-based pedagogies, undergraduate research and experiential work, interdisciplinary majors, and a strong emphasis on integrating expertise with creativity and problem-solving:

Rooted Globalism: To cultivate informed and engaged citizens who are knowledgeable about each other’s histories, traditions of thought and affiliations; and skilled in navigating among local, national and global identities and commitments.

Collaborative Problem-Solving: To instill the habits of collaboration and the ability to synthesize disparate insights in solving complex challenges.

Research and Practice: To enhance the ability to forge links between theory and practice in the many-sided and rapidly changing world of human need.

Lucid Communication: To develop the ability to communicate effectively, both orally and in writing, and to listen attentively to different viewpoints in coming to mature judgments.

Independence and Creativity: To nurture free inquiry, deep reflection and a drive to ask interesting questions and find compelling answers.

Wise Leadership: To shape thinkers and doers who possess the moral compass to guide communities and institutions toward a common good and who have the wisdom and technical competence to deal effectively with complexity.

A Purposeful Life: To form reflective scholars who test their core beliefs, connect their course of study to big questions of meaning, and who build the capacity for lifelong learning and exploration.



As the team of 20 Duke faculty crafted the initial curriculum, “the charge we were given was quite broad,” Noah explains. “The biggest challenge was there weren’t any significant parameters. We wanted to create something new that we thought Duke and other institutions could learn from, while maintaining some of the hallmarks of a Duke education.” At the same time, because they weren’t designing something for Duke itself, there was “very little territoriality” among the faculty.

“[We asked ourselves], ‘what if we didn’t have to start with majors and departments?’” Noah recounts. Instead, they began with an “open source approach to building the curriculum.”

Noah explains that they drew inspiration from other global, joint-venture universities like Yale-NUS and NYU Shanghai, who “freely shared” with them. Rather than a competitive model, Noah says that it was much more of an open source approach, looking at different models from Duke and across the world—particularly in Asia.

Creating an integrated curriculum required paying attention to the how: “if you pull one string it affects the rest of the curriculum,” Noah says. “If you say, I want three more requirements here, it has significant effect everywhere else, so people had to think collectively.”

Once they had settled on their own ideas of what the curriculum should look like, the team actively sought input and buy-in from their Chinese counterparts. Because DKU is accredited in both China and the U.S., they had to win approval from a range of stakeholders, including the Ministry of Education in China, as well as Duke’s faculty and board of trustees.

Still, getting faculty to embrace the interdisciplinary nature of the curriculum was challenging. “There was and is an ongoing tension between faculty who believe that there’s a foundational amount of information that needs to be taught and those who see the integrative, interdisciplinary parts as crucial from the very start,” Noah says.

This is due in no small part to the way that we all have been taught—people learn how to do certain things and have a tendency to fall back on what they know. Faculty self-segregate by how they identify themselves, “as philosophers, chemists, or historians,” Noah notes. Or they are concerned with how things will be structured in the absence of traditional academic departments. That’s why DKU emphasizes its faculty hiring process,

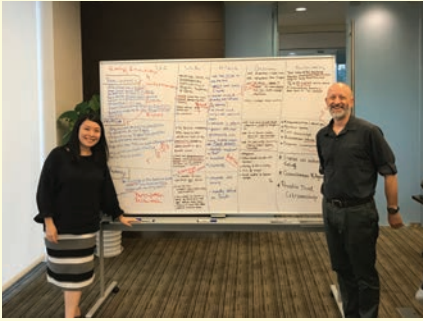
to ensure that everyone who joins is committed to the project.

Faculty hiring at DKU is truly unique. Initially, they started with the Duke Faculty Committee. Duke is still responsible overall for both the curriculum and faculty in partnership with the DKU faculty.

Now that they do have DKU-specific faculty, they play crucial roles in the hiring process of additional colleagues. “After we review the initial applications and do a set of Skype interviews, we invite about 60 faculty to Duke in three different cohorts of 20 for two days, followed by a three-day visit to DKU,” Noah explains. Those who are invited don’t come in as individuals though. “You come with 20 other faculty of all disciplines,” Noah adds. Then they give a talk about their work to a broader divisional audience.

On the second day, they “put all the faculty into three buckets and mix them up.” They are given a curricular challenge in these groups and design a new major for DKU. In the afternoon, different groups respond to design challenges such as teaching in a compressed format. The point of the exercise is to “learn to do it with other faculty from different disciplines,” to make prospective hires understand that “this is a live experiment that they’re entering into,” Noah says. “If they don’t like working across different disciplines, that’s ok; we want to find faculty for whom this is a good fit. Finalists go to DKU for a last set of interviews.”

Once new faculty have been hired, they take part in a six-month learning innovation fellowship. This fellowship builds “a common understanding of the habits and concepts that underlie the entire curriculum, to highlight how the same key ideas can show up in different ways in different courses, and



TEAM TEACHERS PROFESSOR SELINA LEI-HENDERSON AND PROFESSOR NOAH PICKUS ANALYZE STUDENT WORK

Photo credit: Noah Pickus

to foreground the skills necessary for active learning,” Noah says. Ultimately, the fellowship becomes part of the onboarding process, getting faculty to engage with the unique approach to curriculum, develop the skills for teaching in it, and make their own contributions to its development.

The 2019-20 incoming class of 325 students represents 28 countries including China, Canada, the U.S., the United Kingdom, Mexico, Japan, South Korea, India, Italy, and Ethiopia. Last fall, the university welcomed an inaugural undergraduate class of 259 students including 79 international students.

“These students will have the continual experience of learning to see from multiple points of view and to work together across cultural boundaries—a crucial skill for the future,” Noah explains. “They will have encountered big questions and grand challenges from the beginning of their education and been steeped in the wisdom traditions of different cultures. And they will have developed the habits and skills—creativity, analytic rigor, emotional intelligence, and communication—that enable them to remain agile and flexible as the world and the world of work changes.”



INSIDER TIPS

Innovating outside the operating structure: Innovation looks different depending if you're starting from scratch or working within the confines of a traditional university. "DKU exemplifies what can happen when an institution sets up a new unit outside of the normal operating culture and structure," Noah says. "The point is to give this unit permission to take risks that the larger institution can't."

Resist familiar norms: Academic norms and structures are difficult to get away from. Faculty are trained in traditional disciplinary methods and receive recognition from their peers in traditional departments. Even students, parents, and trustees who are looking for new ways to teach and learn can be tempted to return to what has long been deemed standard.

The trick according to Noah is "to ensure that a new unit is protected enough from the standard metrics so that it can constantly push the needle further. There are so many embedded forces that will bring things back to the norm, you have to give faculty permission to break the rules."

Iterate as you go: This permission will "ultimately enable a lot of bottom-up, radically incremental changes by those on the ground, living the daily experience and constantly iterating their way toward what works best," Noah says.

This process gives way to the next challenge: bringing valuable lessons back to the larger institution to help transform its own practices.



GEORGETOWN UNIVERSITY



POINTS OF INTEREST

- Georgetown University's Designing the Future(s) Initiative combines top-down permission from the President's Office with grassroots efforts of faculty and staff to create curricular innovations. Its director, Vice Provost for Education Randy Bass, has designed a **system-wide and multi-level method for change within a legacy institution.**
- Future(s)' core change method is to **rearrange the building blocks and institutional levers** at Georgetown that will affect the student experience. Its projects switch up credit hours, learning methods, and course duration, and Future(s)' motto is that every project has to break at least one rule of traditional higher education.
- Future(s)' major projects include an **interdisciplinary core curriculum pathway called "Core Pathways," one-unit courses for seniors,** and a course prefix called UNXD, which allows Future(s) to design, develop, and run alternative courses for students.



HIDDEN LEVERS + CAREER CRAFTING | CITIZEN SHAPING

Photo credit: Georgetown University

Photo credit: Georgetown University

YOUR GUIDE



Randy Bass
Vice Provost for Education and Director,
The Red House + Baker Trust for
Transformational Learning

For more than a hundred years, a university education has been structured more or less the same way. Disciplines are divided by department and students follow a core curriculum or set of general education requirements before choosing a major and taking classes that fall within that specific discipline.

The seeming inflexibility of such structures could appear insurmountable for those itching to change the student learning experience, but to Randy Bass, they posed an enticing systems puzzle. Randy sees the institution as a set of building blocks that, when arranged in new ways, can reshape the student experience without requiring a ground-up reconstruction of the institution.

While he is now Vice Provost for Education, Randy has seen the institution from many vantage points, including as a faculty member, as the founder of Georgetown's center for teaching, learning, and technology innovation, and in a variety of other roles throughout the university.

Five years ago, Georgetown decided to respond to the narrative around universities like Georgetown that they were "old, privileged, and don't want to change." Randy's experience told him that Georgetown needed to change—but it had to happen in a way that didn't feel threatening.

So he decided to prioritize areas where there would be less resistance, in the hopes that those changes could drive further innovation throughout the university. His mission was to start a variety of different projects that would each break one rule of a traditional higher education experience. The goal? To see what was possible and ultimately, reinvent the status quo. This approach was supported entirely by philanthropy, mostly from alumni, which gave the initiative more freedom than it would have had if funded internally.



Randy conceptualizes his work through 'slow-change' and 'fast-change' strategies, a concept based on the language and ideas from Daniel Kahneman's book *Thinking Fast and Slow*.

“Every campus needs both in dialogue,” Randy explains. While someone like him might want to tackle innovation quickly, he knows that it must be done hand in hand with slow change, so that it’s more palatable to the institution. But most campuses don’t have a mechanism for “fast change,” which is what this work became.



THE RED HOUSE, A TOWN HOUSE ON GEORGETOWN'S CAMPUS WHERE RANDY AND THE FUTURE(S) TEAM WORK ON THEIR CURRICULAR PROJECTS

Photo credit: Georgetown University

He also looked for inspiration outside of traditional private and selective universities. Large research public universities and community colleges provided him with ideas of how to innovate, that he translated in a way that fits with Georgetown's context.

With the benefit of hindsight, Randy describes what has become the Designing the Future(s) of the University Initiative as going through three distinct phases.

The first phase he calls the “let’s move fast and break things phase.”

“During that period, we were uncritical and exuberant, taking the approach that everything we could think of would be worth launching,” he says. “We thought that rolling out every boundary-pushing idea would be the right approach, so the MO became, ‘hang out the shingle, send

out the provocative document, and bring us your craziest ideas.”

The result? A lot of little projects running at once: breaking up the standard one-size-fits-all semester, modular courses, academic credits that wrapped around experiential learning, studio-based learning, and more. Although Randy and his team tried a number of different things, they never got a complete degree-level pilot off the ground, in part because it was moving too fast. After two and a half years, they hit a ceiling with the approach of working with faculty who brought in their own ideas.

They realized they needed to try something new.

For the second phase, Future(s) took a different approach, launching fewer programs that were larger in scale. The idea, Randy explains, was to create a structure and invite faculty to join in to reinvent and reimagine what the structure would look like. “We wanted to create something that was attractive, that people would want to join. It’s been two years and the programs have been largely successful.”



AT A GLANCE: DESIGNING THE FUTURE(S) INNOVATIONS

CORE PATHWAYS

For decades, Georgetown hadn't done a full-scale revision of its core curriculum: general education requirements remained constant, although targeted additions and changes were made over the years. But there was little savor for taking on a large-scale revision of the whole program.

Randy and the Future(s) team stepped in, creating Core Pathways—an alternative to Georgetown's traditional core curriculum that students can opt into. Core Pathways currently focuses on climate change: every class a student takes as part of Core Pathways touches on the issue in some way.

Instead of treating these courses as disparate and distinct classes, Core Pathways brings learning and disciplines around a central theme. Students take two modules that are 1.5 credits each over a semester, which are taught by

a different professor in a particular discipline, such as the theology of climate change and the literature of the Anthropocene.

Faculty work together in an interdisciplinary way, and students are exposed to a subject from a number of different points of view. Core Pathways also includes an experiential learning component: all students who take it come together on a monthly basis for Integrative Days, participating in a real world challenge or scenario that has to do with climate change. They bring to bear the knowledge acquired in their classes into an interdisciplinary project or practice-based setting.

BRIDGE COURSES

Bridge Courses are designed for the eighth semester senior. The Future(s) team realized that many students were going part-time in their last semester, but

also didn't necessarily feel prepared for life post-graduation.

There are two different types of Bridge Courses: those that revisit the core curriculum, and those that prepare students with tools for life after university. The former gives seniors an opportunity to take a class in a discipline or with a professor that they may not have otherwise had access to.

Future(s) works with professors who teach standout or popular courses and redesigns them to be a one-credit class that are available to students outside the department. For instance, the Future(s) team worked with Terry Reynolds, a professor in the theology department, to translate his class on Freud and the conception of the divine into a Bridge Course called "Freud and the Good Life."

The second category of classes gives students an opportunity to learn real-life skills in the classroom, such as negotiation or personal finance, that they may not learn in their academic courses.

UNXD (University Cross-Disciplinary)

Future(s) has its own course designation and implementation process, so the team doesn't have to run classes through another department, thereby directly impacting Georgetown's curriculum. UNXD, or "University Cross-Disciplinary" courses are just for Future(s)-supported classes. To get this designation, the

course must be interdisciplinary, innovative, and new.

Historically, new classes were added to the course catalog by going through the department's or school's approval process, which included reviewing the syllabus and deciding whether the class should be added. Future(s) courses initially went through much the same process—but rather than getting committee approval from just one school, any given course would have to be approved by all four undergraduate schools.

Georgetown's main faculty governance structures streamlined this by establishing a single Future(s) Advisory Committee that approves Future(s) courses. Now there are two straightforward ways to develop a UNXD course.

First, a faculty member in any department brings a fully fleshed out idea for a course and syllabus to Future(s) that would not otherwise work in their own department.

Second, a multi-stakeholder team starts with a problem and brainstorms solutions to address it. For example, to create the Mastering the Hidden Curriculum course, the director, student leaders, and staff from the Georgetown Scholars Program, together with the Future(s) team developed a course to support first-generation Georgetown freshmen from the curricular side as they navigate

the university. They co-developed the syllabus and course readings and found professors who were eager to teach the course. This work yielded a one-credit seminar offered in the fall semester that targets first generation, low-income students, and bolsters the overall support network of the Georgetown Scholars Program.

“Core Pathways was a really tangible way for me to actually create something that has a lasting legacy,” says student and rising junior Leslie Telleria. “As a student, it’s exciting and enticing—[Core Pathways] gives you autonomy and ownership of your school. Not only do I go to Georgetown, but I’m a part of it.”



GEORGETOWN STUDENTS MAP THEIR CARBON FOOTPRINT IN A CORE PATHWAYS INTEGRATIVE DAY

Photo credit: Georgetown University



Randy points to a number of necessary ingredients for the success he and his team have seen.

First, they needed to identify the building blocks or pieces that had to be in place to get the project off the ground. Because this had never been done before, Randy emphasized clearly defining these steps, ensuring that they could iterate without “rocking the curricular boat.” For Georgetown, these building blocks included: credits, modules, normalizing new genres of courses, and then assigning credits to experiential learning.

The second key was finding a balance between doing something small enough in scope and scale that the faculty would feel comfortable with the pilot going forward, and boundary-pushing enough to really make an impact.

Finally, none of it would have been possible without stakeholder buy-in and involvement. The team developed a faculty governance group that includes representatives from every department and the members of the group review and approve every project that come through the Designing the Future(s) of the University Initiative. The projects could only run as a pilot, and eventually become part of the curriculum, with this approval. The team also brought in the registrar, advising deans, people from the financial aid office, and those responsible for accreditation to ensure that their

perspectives were incorporated in the agile design process.

Randy readily admits that his own position within the university has been key to the initiative’s overall success. As Vice Provost for Education, the board, president, and provost all asked him to lead this disruptive work—“it’s not just a handful of faculty members making trouble on the side,” he notes. This gives the project validity, allowing Randy to implement the ideas and changes that the team has generated.

The Future(s) team has now reached its third phase: thinking about and having an impact on the entire campus ecosystem. The Whole Curriculum Framework, which is a driving concept of the third phase, is about integration. It connects the co-curricular with the academic curricular



GEORGETOWN STUDENTS LEARN ABOUT THE PHILOSOPHY OF CLIMATE CHANGE IN A CORE PATHWAYS INTEGRATIVE DAY

Photo credit: Georgetown University

core and aligns the work of the two such that the term “curriculum” encompasses it all.

“What kind of thinking, planning, designing, and executing can we do if we think of the curriculum and the co-curriculum as a single whole curriculum?” Randy asks. “How would that change our thinking?” It’s not so much about drastically changing what exists, but instead about bringing the disparate parts together.

Many universities have maxed out their ability to construct more buildings and enroll more students. Scaling can’t continue to happen this way. So Randy wants Georgetown to bring the co-curricular into the academic fold, allowing the institution to scale, improve, and intensify using only existing resources.

With the co-curriculum thriving, Randy sees an opportunity to integrate it with the academic curriculum. For example, rather than looking at the curriculum through the lens of disciplines, Randy

hopes that the university will consider dispositions and ways of thinking and doing. This goes beyond academic subjects and incorporates competencies, abilities, and capacities—especially those that students may develop outside of the classroom as well.

Whole Curriculum seeks to streamline a student’s experience so they can better plan and personalize their degree. It’s also more equitable. As long as many essential experiences—such as internships—sit outside the credit-bearing model, the more it advantages the already advantaged. There needs to be increased dialogue between centers, the academic core of the university, and the co-curricular, Randy believes.

But Randy knows his work—and that of the higher ed system isn’t done.

Randy has observed over the last 30-40 years that higher ed has spent millions investing in and developing this rich co-curriculum, from service learning to study abroad to entrepreneurship initiatives to a whole range of student support programs around inclusion and diversity. In the next 30 years, Randy believes institutions will need to focus on this effort of bringing the curricular and co-curricular together.

“I think of it as a kind of fundamental condition of most universities,” Randy says. “I don’t think the model is broken, but it is hyper-extended. Being hyper-extended means that it is very difficult to improve opportunities for transformative learning without making education more inequitable and even less affordable.”

This will require finding innovative ways to continue evolving the learning experience that are not premised simply on expansion. In this context, innovation cannot be separated from equity and affordability.

Many of the resources that schools need are already at their fingertips. “On most campuses, these resources already exist in centers that don’t think of themselves as part of the academic curriculum,” Randy says. “So how do you rewire those relationships to help the school see the centers as a resource, and their staff as educators, for delivery of academic programs, and help the centers see that they can come in from the margins?” These co-curricular components are “actually part of the instructional neural network that allows us to grow as an institution.”

INSIDER TIPS

Break one rule at a time: Randy found that the best way to challenge the status quo at Georgetown was by thinking strategically about the building blocks of the institution. At Georgetown, each pilot broke just one rule, with the hope of eventually creating a tipping point whereby the paradigm would shift, but it wouldn't feel abrupt for stakeholders.

To do this, Randy gave himself permission to think outside of Georgetown's existing 'rules.' Then he built a team, with whom he worked to figure out which rules are worth changing.

Articulate your values: The team took these ideas to the larger community, engaging faculty, administrators, and even students and identifying areas of alignment and divergence. Then they dug down and identified the university's values, the barriers to representing those values, and determining what was possible to change.

Find your points of influence: Along every step of the way they asked, "what is our power to respond to this?"; "what is outside of our power that's part of the larger institutional structures that are impinging on some of these?"; and "how can our unit change?"

Finally, this work isn't limited to the 'Randys' of the world. Even someone who is not an administrator can use these steps to facilitate change. Any faculty member can ask these questions—every person at the university has some piece of the educational mission in their control and that they can improve on or re-imagine.



GEORGIA TECH



POINTS OF INTEREST

- Georgia Tech's five Living Learning Communities (LLCs) provide students with the **space and curriculum to learn, live, and work together**. In their first year, students live in the LLCs and take courses related to the focus of their LLC.
- **Staff and faculty have dedicated LLC positions** that allow them to focus on the LLC and their students.
- In LLCs, students pursue real-world challenges in teams—and have the option to continue their work past their freshman year. The LLCs are designed to foster leadership and soft skills, and **equip students to navigate ambiguity** in the rest of their undergraduate and postgraduate experience.



CHANGING SPACES + HIDDEN LEVERS | AGENCY-ORIENTED | CITIZEN SHAPING

Photo credit: Georgia Institute of Technology



Photo credits:
 Kari headshot: Dottie Hunt
 Jeff headshot: Georgia Institute of
 Technology

YOUR GUIDES



Kari White
 Co-founder, Georgia Tech LLCs;
 Associate Director; Center for
 Academic Enrichment for
 Living Learning Communities



Jeff Davis
 Grand Challenges Faculty;
 Co-Director and Associate Professor
 in Georgia Tech's School of Electrical
 and Computer Engineering

Have you ever wondered whether college grads are truly ready to tackle the real world when they enter the workforce?

Kari White, Wes Wynens, and Rob Butera did. When faced with the question "what happens to our students in the workplace, and are they prepared?", they realized that while students were prepared for the 'real world' from a theoretical and disciplinary perspective, they lacked critical leadership and soft skills and the ability to navigate ambiguity and collaborate creatively.

They decided that one way to address these gaps was to create a Living Learning Community on campus—something the university's President had supported previously and was eager to try at Georgia Tech. Instead of running it through residential life, they chose to try it from the academic side, prioritizing coursework.

From there, Living Learning Communities (LLCs) at Georgia Tech were born.

The team, composed of Kari (Associate Director Center for Academic Enrichment for Living Learning Communities), Wes (Director, Leadership Education and Development and Co-Director Grand Challenges LLC), and Rob, (Associate Dean-Academic; Associate Dean for Research and Innovation, College of Engineering; Professor; Vice President for Research Operations) decided to offer the LLC to first year students. "If they don't

get involved in their first year, it's much harder to hook them," Kari explains. "If we were going to do the living part, it had to happen at the very beginning."

The first LLC they launched was Grand Challenges, in 2012. Students from any major can apply to join the program. Interested first year students must simply apply before they arrive on campus in the fall. In Grand Challenges, students not only live together, they also study and work together.

Those who take part in the LLC live in a designated building that serves as dorm, lounge, and classroom, thereby creating a stronger sense of community among them. They also take one class each semester with their Grand Challenges peers. Together, they identify a 'wicked problem' worth solving in the first semester, and in the second semester they develop a solution that they can implement themselves. The work happens both within the three hour course and outside of class hours, made easier by co-location.

One team in 2014, for example, addressed the challenge of girls underperforming in maths and sciences. They sought to drive interest among pre-teen girls, working first with local Girl Scouts troops to locally test the program. The result, Stempower Inc. now offers STEM education programs to young girls, fostering their interest while boosting their confidence.



**GRAND CHALLENGES TEAM, SPECTROSAM,
AT ANNUAL GRAND CHALLENGES AWARDS
CEREMONY AND BANQUET**

Photo credit: Georgia Institute of Technology

Mary Zhou, a student who participated in Grand Challenges in her first year and is now a student assistant, saw the benefits when she started at Georgia Tech: “Living together and then taking a class together made it so much easier to know everyone. That helped me, just knowing every person in my dorm and in that class.” Now that she’s no longer in Grand Challenges, she sees how lonely it can be in other classes where she doesn’t know everyone.

Kari and the team also recognized that the lessons around problem-solving best serve students early in their education so that they have the full four years to ‘practice.’ It’s not just about devising a solution, it’s also learning that failure is part of the process and how to pivot from that point.

By the time the students are seniors, they can navigate this and begin to teach their

peers and the younger students as well. It serves as a multiplier, too.

“We don’t have to teach every single student,” Kari says, “if we get enough of them, they will all teach each other how to do this.”

The LLCs are only sustainable because the students can receive credits for the work they do as part of them. During the development process, the school decided to make the academic component part of the normal curriculum and provide credit-bearing courses so participating doesn’t extend a student’s time at Georgia Tech.

Now there are five Living Learning Communities at Georgia Tech—not just Grand Challenges. They confront different issues, like Global Leadership, which looks at the UN Sustainable Development Goals, and Explore, which is a research and pre-health program. CreateX is in the works, focusing on entrepreneurship and innovation. This fall, one-third of the incoming class will take part in an LLC. The goal is to increase this number to eventually reach 60% of the incoming class.

Getting faculty and staff involved has also proven essential. The LLCs have dedicated staff that are there to listen, but also to encourage the students and their ideas. The staff roles are intentional, dedicated positions—it’s not someone’s part-time job or an afterthought. Faculty who join the LLC to co-teach courses are also bought out of parts of their teaching load, so that the position can fit into their multiple other roles on campus.

Jeff Davis, the Grand Challenges Faculty Co-Director and Associate Professor in the School of Electrical and Computer Engineering, ensures he makes himself available to the Grand Challenges students.

“Sometimes,” he notes, “I’ll do my office hours in their study lounge. I’ve noticed that’s a great opportunity...[because] it gives students a real opportunity to come to meet with me.” Jeff explains that it’s “nice going into their habitat,” as the time he spends there allows the students to open up to him a lot more.



'EXPLORE' LLC STUDENTS AND FACULTY BUILD COMMUNITY

Photo credit: Georgia Institute of Technology

Mary says she benefited from people like Jeff being available and approachable, explaining that “they do a really good job of keeping things casual...[which] makes it a lot easier to go and talk to them.”

The biggest difference between the Grand Challenges faculty and those in other departments, she says, is that you don't have to make an appointment to talk to them. With the other professors, “unless you have an actual really good question to go and ask the professor, most of the time it's not worth it [to make an appointment with them].”

High school can be a little like jail, says Kari, because all the students seem to hear is no.

“You just do what you're told to get through it.” The LLC should be the opposite of that. Kari encourages students to ask for whatever they need, or even to do things and ask for forgiveness later.

She says that it's her job to say yes, as long as it's legal. The staff understand this as well and are involved and invested in the students' experience.

While LLCs have been widely successful on Georgia Tech's campus, space will be an obstacle to further scale them. Going beyond 60% would be challenging, Kari says, because after that “the buildings become too big. You can't create community for 400 or 500 people—that's too many.”

Plus, getting to this place wasn't easy. The biggest challenge was creating a dedicated space for the students. It couldn't just be a regular dorm, Kari recounts, it had to have a large communal space where they could get together and work. Eventually the Housing Department helped find a space that they renovated for Grand Challenges, to include amenities like chairs with tablet arms, huge walls that students can write on, and rolling white boards.

The entire endeavor was pricey too. Kari notes that the funding request she made to the Provost was “unprecedented for co-curricular programs.” She didn't know if the request would be approved, but without it, “we would not have been able to scale LLCs,” she says. “I faced

and still face quite a bit of bureaucratic, infrastructure, process, and general territorial resistance to scaling LLCs.”

Another challenge was developing an application for the LLCs. It had to work with both the Office of Admissions and Department of Housing's systems, but they use different ones that don't ‘speak’ to one another. “Overcoming these challenges requires finding workarounds that everyone can live with while continuing to push for ‘more,’” Kari explains.

To do this, Kari always turns the conversation back to what is best for students.

“Ultimately, all of this work is done to provide students with an experience, and every piece of the infrastructure, systems, and processes are designed to make that experience accessible,” she says. “Workarounds give me time to gather data to support my arguments for better systems, processes, and sometimes funding from partners to do those things.”

Looking back on the seven years since Grand Challenges was first launched, Kari was taken “by the transformation [she] saw in students from the beginning to the end of the year—both as thinkers and as people.”

“I see a change in them in how they see the world,” she explains. But that’s not all. The type of connections forged in the Living Learning Communities are special too: “the prom queen and this person who never looked up from his computer become friends,” Kari says. “They would have thought they were too different to have that relationship, but they will spend hours having deep conversations through the middle of the night.”

This might not seem significant to an adult, but it’s easy to forget that college freshmen are basically what Kari calls ‘13th graders.’ “They’re still so insecure,” she says. So the LLCs give them space to “learn about humanity and it changes their ability and perceptions of what it means to work with someone different from them and feel ok about that.”



GRAND CHALLENGES PRESENTING PROJECT POSTERS FOR FACULTY, PARENTS, AND GUESTS AT ANNUAL GRAND CHALLENGES AWARDS CEREMONY AND BANQUET

Photo credit: Georgia Institute of Technology





INSIDER TIPS

Find a strategic champion: Kari believes that having a champion is vital. At Georgia Tech, that person was Rob: “he is—and was then—a full professor, co-appointed in two engineering schools. He is a Georgia Tech alumnus and has spent his career here,” Kari notes. He is well-known, well-liked, credible, and has a huge network she adds—all of which made him the ideal candidate to help move the idea forward.

Identifying Rob was the first step to effecting change on campus. Then they had to get buy-in from the people they needed to partner with: housing, student life, and admissions. To get Grand Challenges off the ground, they worked with these groups not just on messaging, but also on the concrete steps needed to make it happen.

It is essential that the champion have well-established relationships that they are willing to use. This piece is important, Kari says, because “Living Learning crosses all the boundaries, every single one of them. You’re going to step on people’s toes, and you may not even know that you’re doing it.”

Orient around the student experience: Beyond a champion, Kari notes emphasizing the student experience was key to align stakeholders with conflicting priorities. In the process, she used workaround systems to allow the work to move forward—while continuing to push for more.



INDIAN RIVER STATE COLLEGE



POINTS OF INTEREST

- A community college in Fort Pierce, Florida, Indian River State College has stand-out **student success metrics, and has developed a student-centered culture that has led to success at scale** for its more than 24,000 students.
- President Edwin Massey attributes IRSC's success to a series of **culture shifts within the institution**, which have allowed it to foster innovation and intentionally shift focus nimbly around student needs.
- In addition to the student success measures that IRSC has implemented, like **Guided Pathways and connectivity between advisors and faculty**, the college began to offer four-year degrees in 2008. Responding to industry needs and the fact that many of its students were unable to drive the more than 60 miles to the nearest four-year college, IRSC now offers 17 Bachelor's degree-granting programs, many of which serve adult learners and former IRSC students.



HIDDEN LEVERS + RADICAL AFFORDABILITY | CHANGING PAGES | AGENCY-ORIENTED

Photo credit: IRSC

Photo credit: IRSC

YOUR GUIDES



Edwin Massey
President



Christina Hart
Vice President of
Enrollment and
Student Services

The numbers at Indian River State College (IRSC), a community college in Florida, are impressive. Ninety-four percent of graduates either find employment or continue their education, often earning more than double the average entry wage. The education is affordable too. It's been designated the 3rd most affordable college by the Department of Education, with no tuition increase in eight years.

IRSC was also named the winner of the Aspen Institute's Prize for Community College Excellence this year, recognized for its Guided Pathways program, career counseling, and unique approach to major selection via meta majors—as well as its move to offer 17 Bachelor's degree programs.

These successes have come, in part, from the curricular and structural redesigns IRSC has gone through over the past 19 years. Among these changes is IRSC's Guided Pathways model, which the college has been using since 2007. Guided Pathways is the foundation of students' academic experience, and consists of four components: mapping degree pathways to student end goals, helping students choose and enter a degree program, keeping students on track, and ensuring that students are learning throughout the experience.

Through the adoption of Guided Pathways, students at IRSC begin with the endpoint in mind, rather than the traditional model of considering careers as they approach

graduation. Now career exploration starts when they enter IRSC, and students "finish on time, save time and money, and move into the workplace or transfer to the next level quicker," says IRSC President Edwin Massey.

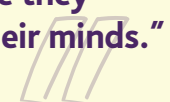




IRSC EXPOSES PROSPECTIVE STUDENTS TO HANDS-ON ACTIVITIES THE SCHOOL OFFERS THAT MIRROR THE WORKPLACE

Photo credit: IRSC

“This moves students away from the “cafeteria model,” as Vice President of Enrollment and Student Services Christina Hart calls it, where they “come in, explore, and take random courses.” Ed compares it to studies where a person goes into a store and they have “150 different varieties of jelly.” Often, he says, “people opt out and don’t end up buying anything because they can’t make up their minds.”



PROSPECTIVE IRSC STUDENTS DISCOVER CAREERS IN TECHNOLOGY AT GREAT EXPLORATIONS, A CAREER EXPLORATION EVENT FOR HIGH SCHOOL JUNIORS AND SENIORS

Photo credit: IRSC

To implement the Guided Pathways framework, IRSC advisors designed templates for all academic programs, delineating student prerequisites to earn an Associate's degree. Advisors turned those templates over to faculty, who verified sequencing and identified key courses students need to complete to satisfy the requirements in a given major.

Part of this work included the creation of meta-majors. At IRSC, program majors are broken down into eight meta-major areas, such as health sciences, education, business, and STEM. There are many different majors in each meta major, but by limiting the options it makes it easier for students to choose—and once they choose a meta-major, they can begin fulfilling requirements that will contribute to any individual major within that larger category.

"You can go to our webpage and you can watch a video on each of the eight meta-major areas, showing an individual what kind of work that they will be doing," Ed explains. "I think that's been helpful for students to make up their minds" as narrowing down the options takes some of the paradox of choice out of the equation.

Over a few months, IRSC mapped out and implemented full- and part-time pathways for all programs. "We were able to do it quickly because of our culture," Tina says. "People were buying in because they understood the why."

IRSC's commitment to its students is also evident in other innovations. In 2007, IRSC "took the pulse of the four-county community" where IRSC is located, and identified those who had an Associate's degree and "were place-bound and work-bound" and limited in their earnings. Many of the AA graduates were unable to relocate to pursue a Bachelor's degree, Tina explains. There is no four-year institution within a 60-mile radius, which exacerbated the problem.

Starting in 2008, IRSC took advantage of a law that allows community colleges in Florida to offer four-year Bachelor's degrees, getting re-accredited to offer Bachelor's programs. They now have 17 programs that respond to the needs of the local employers, which has helped diversify the workforce and keep graduates in the area to build a stronger economy throughout the service district.

AT A GLANCE: STUDENT SUCCESS STRUCTURES

In addition to widespread changes like Guided Pathways and the addition of Bachelor's degrees, IRSC has a number of mechanisms in place to support its students from when they join the college until they earn their degree.

ORIENTATION

Students start thinking about their career from the moment they step foot on campus. Orientation includes a career assessment, and during the first meeting with their advisor, each student chooses their Pathway.

During new student orientation, IRSC welcomes students while encouraging them to achieve their end goal as soon as possible, moving on to either transfer or job placement. Tina says, "We show them photos of what it will look like when they walk across the stage and they write down the date they will graduate" to encourage a focus on their end goal as soon as they begin.

Students also complete an incoming student survey—a non-cognitive survey developed internally—that helps IRSC glean additional information about them, including barriers students anticipate and demographic information. The survey and career assessment provide helpful information for advisors to guide students along the appropriate path.

STUDENT SUCCESS CLASS

The student success course is the first that IRSC students take. It helps them to understand what it takes to be successful as college students, while also challenging them to really dig into career exploration.

The students have to research various careers, looking at the basic skills required, the starting salary, and whether the area or industry is growing or contracting. It ensures that students major in something that will give them their greatest return on investment, enabling future success.



“When we re-designed orientation, the student success faculty and orientation staff worked together to align the content to make sure it wasn’t redundant and assure student exposure was focused on timely information.” Tina explains. “We wanted to make sure things that need to be reinforced—like career exploration—are repeated, but remove that which was unnecessary. The course has been re-evaluated again and again to make it stronger.”

STUDENT SUPPORT DATA SYSTEMS

IRSC actively collects student data to better serve them. This data comes from the orientation surveys and student-advisor conversations, creating a response and support system that automatically alerts advisors when various issues arise.

When presented with a student concern such as missed classes or a diminished quality of work, a faculty member can alert a student’s advisor with the click of a few buttons using IRSC’s online platform, triggering a tailored response from the advisor within a one- to two-day period. The result is a line of communication between often-siloed parts of the student experience, which creates a “helpful triage environment to help students as early as possible,” Tina says.



Throughout this work, IRSC has always had affordability in mind. With rising tuition costs across the country, IRSC has managed to keep its tuition low. The school has a central administration across its five campuses, which not only decreases overhead, but also facilitates internal communication.

So how did IRSC get here?

Ed believes their explicit, multi-year effort to change institutional culture has been the key to success.

When Ed became president in 1988, IRSC wasn’t performing to its potential. He spent the first 12 years working to improve the college and its student success measures. Initially Ed remembers, “we thought we could get to quality by rules and regulations.” These early strategies improved the college in terms of conventional indicators and made IRSC more competitive.

Around 2000, Ed and the college’s leadership conducted an internal review to analyze what they had accomplished and where there was still room for growth. The results they found were surprising: faculty and staff across the institution had called IRSC’s culture “complacent.” The leadership decided it was time to re-evaluate: while they had made the college better, it had come at a cost.

“The culture had evolved into a situation of doing things in a correct way,” Ed says, “but in the process of doing that, we had lost touch with innovation and creativity, and developed an environment that did not appreciate risk as much as it should.” IRSC’s culture had become “too much form over function.”

Ed believed that he needed to instill an ethos unlike that of more traditional higher education institutions, one that relied less on rules and more on people. In his mind, this is what would make IRSC successful, and in turn, help its students succeed.

The people of the college were an integral part of the process. Leadership held college-wide meetings in which everyone—staff, faculty, and administrators—were invited to speak, then followed up with interviews with hundreds of the college’s employees and students, and hosted seven town hall meetings. Armed with all the data



THE CRITICAL THINKING PROFESSIONAL LEARNING COMMUNITY MEETS IN THE IRSC INSTITUTE FOR ACADEMIC EXCELLENCE, A CENTER FOR FACULTY INQUIRY, EXPLORATION, AND REFLECTION

Photo credit: IRSC

from these various forums, they found that there were a number of recurring challenges that IRSC needed to work on.

None of the interventions were radical. Yet when implemented together—with deep investment from all levels of the institution—they have led to the success IRSC has realized today.

The first intervention happened at the administrative level: the creation of time-limited work groups focused on a particular issue or project. The groups typically work together for a few months, developing recommendations for change that they bring to the President's cabinet for approval. "People enjoy being on the work groups," Tina says. With faculty, staff, and administrators able to participate, they foster a sense of

inclusion and everyone believes that they can help improve IRSC.

A second intervention that came out of the work groups was a professional development arm that "focused around common themes for [employee] training," Tina explains. This, like the work groups more broadly, further created an inclusive environment, "an atmosphere and a culture to be part of solutions," she says.

Another result that came out of IRSC's culture work is the Advising Excellence Academy. This group meets approximately once a month, bringing advisors together for professional development and inviting faculty to attend at the end of each session for "cross-talk" about student success.

Through the culture work, they have moved from a "directed environment" toward more of a "mentoring environment of leadership," Ed says, from a "chain of command" to a "chain of communication," from form to function, formalities to informalities, institutionalizing to personalizing.

The team put these goals in writing "resulting in a culture of 'creativity and inquiry,' welcoming employee input which would loosen people up to be happier, feel more appreciated, cared for, and included." Their mantra became, "student success is the most important thing at Indian River."

"Wow did they perform," Ed recounts. "It really turned our institution around."

Now the college has a culture that is driven by the commitment of its people, enabled by their freedom to try different things and experiment, through mechanisms such as the work groups. The focus on this culture is what Ed believes has given rise to the mass successes IRSC has seen in recent years.

"We know that students are impacted the most through these two employee groups," Tina says, so by bringing them together they can collaborate and triage ways to better serve and understand the students. "It's a hallmark of our culture that we're not siloed," Tina adds. "We're very connected, meeting all the time, working on things together."



“[The phrase the] speed of change occurs at the level of trust,” is apropos here, Ed adds. “The level of cross-campus collaborations and communications enable us to move quickly. And that’s needed today in education. You don’t want to move too quickly, but you need to move a lot quicker than we did in the past.”

Creating such a learning environment “starts in the parking lot when [staff, faculty, and administrators] get out of their car,” Ed notes. “They feel like they’re supported and cared for. They’re going to do their best work.”

“If the culture is healthy, you’ll see employees start to realize their full potential, and that will translate into student success. Retention and completion rates will improve, producing graduates who are prepared to continue their education or be successful in the high-skill workforce of today. This approach provides a higher ROI for the student and the state,” Ed says.



INSIDER TIPS

The student success seen at IRSC is the result of getting the culture right in Ed’s view.

Build a student-first culture: To get there, Ed asked himself, “How do we provide the environment within our college for every individual to do their best work?” For IRSC, the right culture fit wasn’t a hierarchical one. It was what Ed calls a “mentoring and coaching environment” that puts students first.

Determining the right culture required work—reviews, surveys, and focus groups. The other key element was putting the right people in place. “We need people who feel comfortable and fit into our culture, so we’re very careful when hiring our staff, faculty, and administrators,” Ed says. “But once we engaged in our culture work, the payoff has been significant.”

Lead with the 'why': "I think you have to assess where the culture is, and put your efforts towards enhancing or changing that first. Your work will pay big, big dividends in the future," Ed says. "It's kind of counterintuitive. Sometimes you want to go in and tell people what to do, but if you go in and tell people why, it creates a state of being before doing. If you get the being in place, the doing is pretty easy."

"By having that as our north star, and helping people understand the why, they didn't resist change—they embraced it," Ed says. But he adds that "we can't rest on our laurels for our work. To remain relevant and in business, we need to embrace and foster continuous change, and people understand that."

MAHARISHI INVINCIBILITY INSTITUTE



POINTS OF INTEREST

- The Maharishi Invincibility Institute's (MII) educational philosophy promotes inside-out learning not outside-in, while working with a marginalized population in South Africa. MII **inverts Maslow's hierarchy of needs, elevating purpose and self-actualization** as primary needs to be met, leading to fulfilment of traditionally "basic" needs like economic security.
- MII's curriculum is **holistic, consciousness-based education**: students take part in meditation practices daily, combined with customized online learning that matches pace with students' very different levels of academic preparedness.
- MII regularly sees a radical shift in its students' life circumstances. Incoming MII students are often displaced, refugees, former child soldiers, or from marginalized families. Ninety percent are only operationally literate and numerate at primary school levels, while **70% of its student population would be ineligible to attend conventional university** and over 60% of the students come in with post-traumatic stress disorders.
- MII focuses on leadership and career preparation, with tremendous results. Graduates of MII have a **95-100% job placement rate** and currently hold 11 top executive positions in the banking sector in South Africa alone.



Photo credit: Lebohang Mthimunye

YOUR GUIDE



Taddy Blecher
Founder

In South Africa in 1997, a classroom of township students sat listening to their teacher talking about Christopher Columbus and the expedition he led to the 'New World.' Over lunch an hour before, a girl confided to the other girls sitting around the circle eating with her—and future Maharishi Invincibility Institute (MII) founder Taddy Blecher—that she had been raped. To Taddy's surprise, nine of the ten girls shared the same experience.

This disconnect between what the students were learning in the classroom and their mental and emotional state was startling to Taddy. Columbus was "a million light years away from what the girls were feeling inside and the fear that they had," he explains. He knew he had to act.

Taddy realized that education needed to go beyond just teaching young people facts, history, and math—he wanted to help people find themselves, and heal and forgive.

"I wanted to help them feel that there's a reason to be alive. Because if somebody wants to be alive, and they know their life's purpose, you cannot stop them."

From there, CIDA City Campus was born in 2000—the first iteration of what is now the Maharishi Invincibility Institute. The idea is to give students access to what Taddy calls "the treasure house within themselves."

"We wanted to create the first chain of ultra-low cost universities in the world that is fully self-funding and completely accessible to those excluded from the economic mainstream," Taddy explains.

Students at MII would not otherwise be accepted into university-level tertiary education. They are often displaced, refugees, former child soldiers, or from very marginalized families. While students are required to have received an education through grade twelve, when tested for functional literacy and numeracy, more than 90% are only operationally literate and numerate at primary school levels. Some of the students are in their 40s or 50s because they were excluded from higher education during apartheid. Seventy percent of all entering cohorts are unemployed women, and over 60% of the students come in with post-traumatic stress disorders.



MII STUDENTS STUDY TOGETHER

Photo credit: Lebohang Mthimunye

Short a formal education, MII looks for students who exhibit passion, leadership qualities, and the right attitude. “We want to prove that everybody’s got genius in them,” Taddy says.

Because many of these students have experienced severe trauma and have a limited formal education, the model is all about paced learning—learning how you learn and recalibrating your brain to eventually become an effective leader.

The idea essentially flips Maslow’s hierarchy of needs on its head. A sense of purpose becomes not a ‘nice to have’ to seek out after achieving certain levels of security or financial viability, but rather the key to opening the floodgates to economic success.

The outcomes are quite astonishing. There is a 95-100% job placement rate for students after they graduate and MII alumni currently hold 11 top executive positions in the banking sector in South Africa. Within six months of entering MII, students that previously exhibited symptoms of post-traumatic stress are no longer on the PTSD Scale.

How do they accomplish this?

MII focuses on building resilience, self-awareness, self-actualization, and helping students heal from the various traumas they’ve experienced. Secondly, it equips students with the kind of competencies that they will need to be successful in the workplace and for jobs that won’t be replaced by AI, with the goal of moving “from knowledge to skills to a meta learning to mastery.”

Neo Makgatho, a student who is graduating in December, has experienced this herself. “In the townships, you get to see what having less, what being poor can do to an individual. You lose dignity, nobody has respect for you.” But, she adds, “I’ve always had the mindset that I don’t want to be another statistic. There’s a lot of bad influences in the townships, you just have to be strong enough, because if you believe in your own dreams, you have this vision, you can have a better life.”



STUDENTS DOING DAILY MEDITATION

Photo credit: Lebohang Mthimunye

MII provides a holistic education, including disciplines like transcendental meditation. Taddy calls this consciousness-based education: “the heart and core of what we’re focused on is that this is about human beings, and developing their full potential—so it’s about inside-out rather than outside-in learning.”

“**[These aspects] help you develop as a whole person and enhance your full potential, so that by the time you engage in your academic studies, you are well aware of yourself and what you can do,**” says Tshepo Shole, a student who is also **graduating in December. He says that this has shaped him, helping him “boost [his] confidence level.” Previously, he “didn’t know [he] had leadership skills.”**

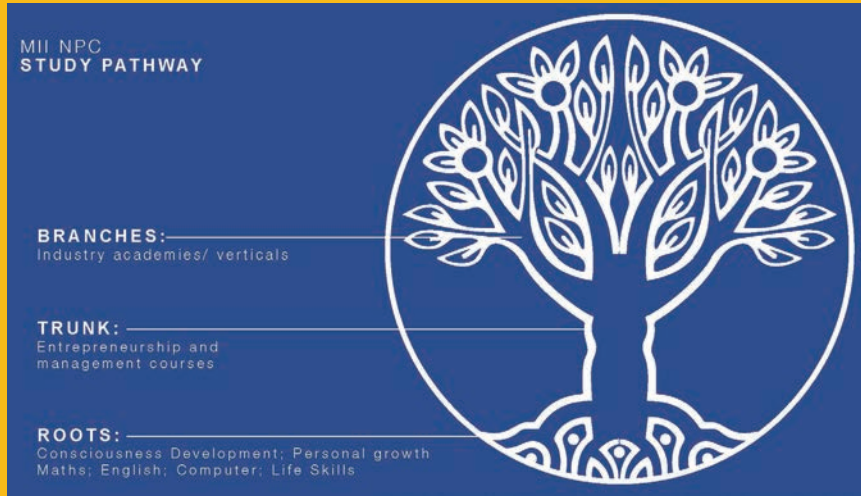


STUDENTS TAKE PART IN DAILY YOGA EXERCISES AT THE MII

Photo credit: Lebohang Mthimunye



AT A GLANCE: LEARNING AT MII



STUDY PATHWAY AT THE MAHARISHI INVINCIBILITY INSTITUTE

Photo credit: Maharishi Invincibility Institute

MII conceives of a student's education as a tree. The roots are the core skills that each student is expected to learn. This includes Consciousness Development, Personal Growth, Math, English, Computer, and Life Skills. Students then make their way up to the trunk of the tree, which is comprised of entrepreneurship and management courses. Finally, the branches represent a variety of industry academies and verticals.

Students have six industry academies and verticals they can choose from during their time at MII. These include insurance,

financial markets, nature conservation, business process outsourcing, ICT, and banking. With each of these options, students are prepared to sit industry qualification exams and given the opportunity to gain relevant work experience.

Tshepo says that these skills and confidence have helped him "grow personally and consciously" so he doesn't need to depend on his parents as much. "That's my motivation, being able to get up and do things for myself, leave a legacy for my future kids and grandkids."

MII seeks to not only prepare students for economic success, but also to equip them for a radically changing world in which many traditional jobs will be replaced by technology. The goal is to provide the knowledge and hard skills to help students get a job upon graduation as well as greater levels of mastery, meta learning, and learning at a speed that prepares them for the changing job market in years to come. Students spend ten hours a day in a facilitated learning environment and are in school 44 weeks a year—as compared to the traditional 30 weeks in other South African institutions.

One course is called 'The Greatness Course,' which includes a self-development piece, as well as reading and software to teach reading speed. MII also uses math software and offers tutoring to its students, which enables personalized learning.

Students work throughout their studies so that they leave MII with a CV of robust work experience. "They've got these designations after their names that are recognized by industry in the field that they love and they've worked in that field,

giving them a real edge in the market," Taddy explains.

Upon graduation, students are conferred an internationally-recognized degree, so they can work or pursue further studies anywhere in the world. Over 18,500 formerly unemployed youth have been educated and are now working. MII also provides South African industry-specific qualifications, designations, exams.

Seeing achievements like these unfold brings Taddy the greatest joy. He loves seeing the light turn on inside a student, because "someone who is 'awake' is an unstoppable force."



INSIDER TIPS

Believe change is possible: Building a higher ed institution from scratch wasn't easy for Taddy, but the most important ingredient for his success was starting from a core of confidence. He knew existing legacy systems could be changed.

Question assumptions: From there, he questioned every assumption about the prevailing education model and considered all of the things he wished he had learned when he was younger. He thought about "all the qualities [he] wished [he'd] had, like passion, happiness, fulfillment, integration, and joy."

Orient around the student experience: He then identified the gaps from those assumptions and wishes and thought, "how could I change education to foster those things?" Ultimately, it came down to asking himself, "what is everything I would love to know? How could I create that for the [students]? It's human-centered education."

MAKE SCHOOL



POINTS OF INTEREST

- Make School is an edu-startup in San Francisco that calls itself “a product university.” The school’s computer science curriculum is project-based and designed with industry partners, and gives students the tools and freedom to build their own projects over time. It offers a **two-year accelerated Bachelor’s degree in Applied Computer Science**, and is the first school offering a degree through a new partnership structure created by California accreditor WSCUC (WASC Senior College and University Commission).
- Make School combines the benefits of a computer science program with **liberal arts courses through its partnership with nearby Dominican University** to give students a robust academic experience.
- The school promotes equity in a number of ways, including a unique admissions process that focuses on intrinsic qualities and non-traditional backgrounds. Over half of Make School students come from low- or middle-income backgrounds where computer science education access is historically limited. **Income share agreements assure that students only pay once they’re employed and earning an income.**



CHANGING PAGES + RADICAL AFFORDABILITY | CAREER CRAFTING

Photo credit: Ben Ambrogi



Photo credit: Ashu Desai

YOUR GUIDE



Jeremy Rossmann
Founder

He didn't realize it at the time, but Make School founder Jeremy Rossmann's experience tutoring low-income students while he was in high school eventually set the stage for the creation of his own academic institution. "As soon as I started tutoring these students, my understanding of reality got totally reset. Features that I thought were the baseline of the high school student experience were not, actually."

"My parents were immigrants to the U.S.—they spent over 100 hours buying every book they could to hack the college system, to get me into college," Jeremy continues. "The students I tutored had nowhere near that support."

Some of the differences between Jeremy and these students were small, he says—as simple as being able to ask his parents for help on his math homework or to edit an essay. But "there are 100 reasons a student from [a low-income neighborhood like] East Palo Alto might miss school" and not be able to afford or stay in college.

Jeremy realized he could have an impact through education. "When you move out of the top 10-15 institutions and move down the prestige food chain, you get students at well-ranked schools who experience a significant disconnect between what they learn in school and the demands of their desired career," Jeremy explains. This in turn has driven a demand for coding

bootcamps—filling the gaps in a student's university education.

But Make School isn't a bootcamp. It is also unlike most universities, which are focused on research. It's what Jeremy calls a "product university."

Make School is a "college where curriculum deeply integrates with the needs of top technology companies," where the commitment to set students up for career success is "baked into the DNA of the school." This career readiness component is especially important for individuals who don't have relatives or family members to support them.

"You need real skills that translate to the workplace or you won't survive,"
Jeremy says.





MAKE SCHOOL STUDENTS LEARNING TOGETHER

Photo credit: Ben Ambrogi

So Make School follows more of a trade school model, focused on equipping its students with tangible, real-world skills—in this case, computer science. But it's trade school meets liberal arts, as students learn not just the technical coding skills but also receive a liberal arts education through Make School's partnership with Dominican University, culminating in an accredited Bachelor's degree.

While Make School addresses some of the shortcomings of a more traditional university, it has its own challenges striking a balance between the university and coding bootcamp models. Make School isn't a "10-week sprint for people in their late 20s with a degree under their belt" like the bootcamps often are, Jeremy points out.

The school explicitly recruits students who wouldn't get into the top-tier colleges but have incredible talent. These same students may not be as prepared for the higher education experience, so they need an acculturation period.

Make School is devoted to putting these students on equal footing, starting with its unique admissions process. A prospective student submits an online application, which focuses on examples of things he or she has built or created—in any part of their life. The admissions team looks for the prospective student to share experiences like service work, part-time work, or even obligations to their family.

"We look at sustained work ethic or places where the student is making a recurring commitment," Jeremy explains. "Lower income students might be babysitting or working part- or full-time jobs to provide more income to their families. We treat those things as very positive and make space for students to share them."

From there, the prospective student does a video interview. Any students missing the technical background to succeed are given an online course called Ramp in preparation. Close to half of any given incoming class take Ramp and many of Make School's students come from low- or median-income backgrounds where access to computer science education has been limited.

Perhaps the most unique component of Make School is its income share agreement (ISA) model. Any student can defer tuition payment, regardless of their financial need. They can take part in the income sharing agreement, by which they give a percentage (20% once they get a job earning more than \$60,000 per year over five years) of their future income to Make School.

Students who earn more will ultimately pay more to Make School, so the school is incentivized to see its students succeed. As Jeremy puts it, "in our model, we win when a student wins."





MAKE SCHOOL STUDENTS POSE AFTER AN ON-CAMPUS PARTY

Photo credit: Make School

“Once you help us out, change our lives, you know, we’re good,” notes one student named Asim Zaidi. “It’s like we’re giving back to the institution that invested so much in us.” For many students, “if it weren’t for Make School, they wouldn’t have [pursued] a higher education.”

Those with financial need can also take a living stipend of up to \$1650 a month that the school disburses to them. After graduating, they pay an additional 5-7% of their pre-tax income for 8-12 years depending on how much stipend they received. Housing options are also as cheap as \$1000 a month, so the living stipend can be enough to cover a student’s food and rent.

By offering students an alternative means to pay for their education, Make School makes pursuing higher education more accessible.

But the school also wants to be worth the student’s while. That’s why faculty and staff collect feedback not only from the students but from industry as well, making sure that the tools and skills the students learn are applicable to the jobs they plan to seek out after graduation.



INSIDER TIPS

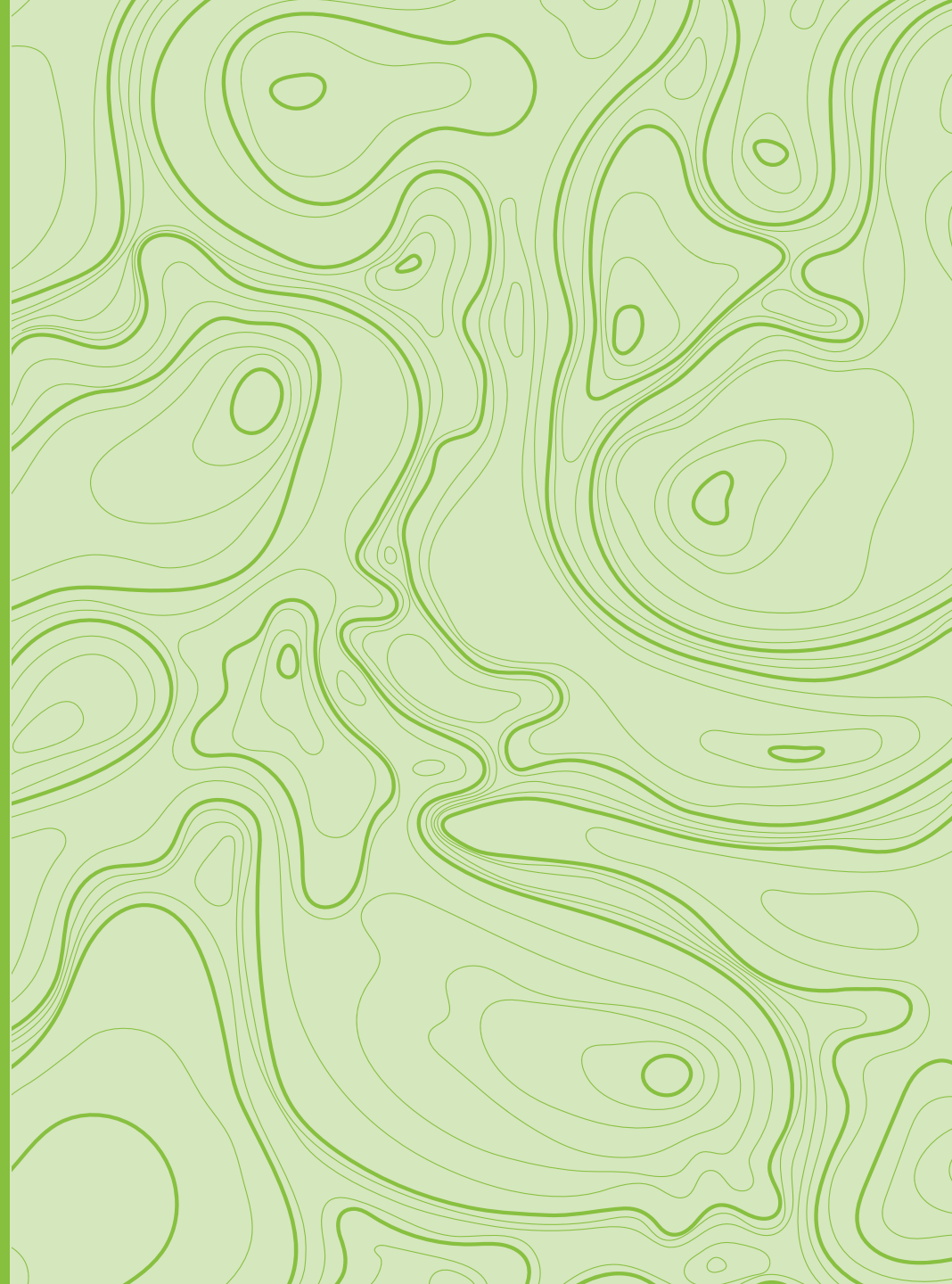
Align institution and student incentives: The most radical aspect of Make School is the incentive alignment such that students only pay if they are successful. For Make School, that has meant its income sharing agreement and the other unique ways students can fund their education. This model not only changes the incentive structure for a higher education institution, it also makes admissions more inclusive.

Explore new, more equitable, student metrics: Tuition is just one part of the solution. Make School also looks at how its branding and application process may discourage low income students from applying. Instead of standardized tests, Make School considers the qualities that make people successful—like grit, hard work, and dedication—and looks for examples of those behaviors in a prospective student’s application.



Build an ongoing feedback loop: Make School implicitly promises its students to give them the skills they need to get a job. It has a structure to collect feedback from its students on a regular basis, understanding what classes they like, what part of the curriculum they're enjoying, and how they feel about faculty.

Make School also talks to companies and employers to find out what kind of skills and attributes they're looking for in a potential hire and what might prevent them from hiring a prospective candidate. This feedback is used to update what they teach at Make School.



MINERVA



POINTS OF INTEREST

- Minerva is a degree-granting four-year program that offers classes online via its proprietary platform, Forum, while students live together in **seven cities around the world over four years using the “city as a campus.”** Students participate in local civics projects and engage with city-based Minerva teams in their global immersion experiences.
- The Minerva curriculum centers around **“Habits of Mind” and “Foundational Concepts,” rather than traditional disciplines**—encouraging students to develop their learning more seamlessly across four years in a variety of different skill sets. Instead of choosing a specific major, students choose from overarching knowledge areas: arts & humanities, business, computational sciences, natural sciences, or social sciences.
- The **admissions process at Minerva is uniquely designed to level the playing field**, ensuring that students are not penalized in areas like financial need. It is refreshed often to ensure its effectiveness.



Photo credit: Minerva

CHANGING SPACES + HIDDEN LEVERS | COMPETENCY-CENTERED | CAREER CRAFTING |
CITIZEN SHAPING

Photo credit:
Ben headshot: Peter Prato

YOUR GUIDES



Ben Nelson
Co-Founder



Mike Wang
Former Director of
Global Experience

Minerva founder Ben Nelson isn't shy about putting forth strong opinions on the nature of higher education. Without knowing it at the time, Ben recognized the need for an institution like Minerva back when he was a freshman in college. He was taking a course at his alma mater, the University of Pennsylvania, about the history of universities, and understood for the first time what a liberal arts education actually means.

Most people, Ben explains, think that liberal arts is "the humanities—they conflate it with poetry or English."

“But a liberal arts education enables students to “not be predestined to a vocation.” At the time that the concept was envisioned, it was intended to “enfranchise the citizen, so that he could be a blacksmith or a farmer or a doctor or a priest one day, and the next day, he may be a judge or a senator or a diplomat.”

In Ben's mind, liberal arts "have nothing to do with writing poetry." They are about providing an individual with the skills in the disciplines or arts that enable him to be free or have liberty. "It has everything to do with being able to be an active participant in your own governance. It is what enables you to have liberty not to be a servant or a subject."

Early on in his college days Ben developed his belief that universities needed curricular reform at the academic core. By curriculum, he meant a core set of courses that all students take that prepare them to be informed and holistically-developed citizens. The ideas he came up with in response to this realization have become the cornerstones of Minerva.



“The key to what [Benjamin] Franklin called ‘practical knowledge’ and [Thomas] Jefferson called ‘useful knowledge’ are the frameworks of thinking,” Ben explains. It is not possible to give a student an education by simply going to them and saying, “here’s a menu of 1,000 courses, pick 30 at random and we’ll give you a degree.”

Years later, Ben combined the realizations he had while a college student with the experience he had building and leading Snapfish, a web-based photo sharing and photo printing service. At Snapfish, Ben learned how to “take an idea and make it a large institution, successfully beating incumbents” and decided he wanted to apply that same approach to an “area that matters.”

Ben worked on the idea that would eventually become Minerva for about 15 months—and had “almost everyone [he] met call [him] a lunatic.” Eventually, he secured the funding to launch the program and worked toward returning to



THIRD-YEAR STUDENTS TAKING CLASS ON FORUM IN A COFFEE SHOP IN BERLIN
Photo credit: Marcus Reichmann / Blink

the curriculum that was once at the core of a liberal arts education.

Ben thinks it is critical to take the time to develop a curricular philosophy to be the driving force behind an institution, as “there is no education without a curriculum.”

“The curriculum is what drives an educational institution,” he says. “And when an educational institution loses sight of the curriculum, it becomes a country club.”

Minerva has returned to the traditional concept of a liberal arts education, while simultaneously turning many of its tenets on their heads. Students don’t live on a fixed college campus in a city or town—they live in seven cities around the world over four years using the “city as a campus.” They don’t learn in a physical classroom—they learn via Minerva’s interactive online learning platform, Forum.



SECOND-YEAR STUDENTS IN HYDERABAD CELEBRATING HOLI
Photo credit: Minerva

Mike Wang, former Global Director of Student Experience, emphasizes the importance of integrated learning—connecting the co-curriculum of the global rotation with the structured academic curriculum—and the need to teach students skills to effectively learn and grow as a ‘whole person’ in a global context.

“Expecting students to instinctively know how to fully leverage Minerva’s global rotation for learning is like expecting a new driver to know how to drive a Ferrari on the Autobahn,” Mike notes. “One would quickly realize, ‘I don’t know how to drive a stick shift. I’ve never driven on a highway with no speed limit. I don’t know how to take advantage of the horsepower in the engine. I need a new set of skills to leverage the specifications

of this learning environment and context.” Students similarly need a set of new skills to navigate a college campus—but at Minerva, this context changes seven times over four years.

What skills does a person need to effectively adapt in new environments to the norms and cultural contexts around them? What mindset does a person need to have the agency to meaningfully contribute and build a sense of belonging in a community?

“Students need to be given fishing poles and taught how to fish” in their first year, Mike says, “such that they can over these four years of college have the skill sets to take advantage of the opportunities for location-based and experiential learning.”

After the first year, they expect students to know how to build professional relationships in the city and complete a mentored, team project. By the second year students are challenged to do a project, and by the third, to scope a new project with someone they don’t know.

The way academics are designed at Minerva is unique too. Instead of declaring a specific major, like economics or chemistry, students choose from the following overarching areas: Arts & Humanities, Business, Computational Sciences, Natural Sciences, or Social Sciences. All of these majors have six concentrations beneath them, such as Historical Forces and Cognition, Brain, and Behavior.

In a student's first, 'Foundation Year,' they all take the same four Cornerstone courses that are based in four core competencies: thinking critically, thinking creatively, communicating effectively, and interacting effectively. During the second year, called 'Direction Year,' students settle on a major, and then choose a concentration for that major in their third, or 'Focus Year.' Finally, in the last year, the 'Synthesis Year,' students complete a Capstone Project that is self-driven and self-directed and supplemented by tutorials.

Rory Foulger, a 2019 Minerva graduate, found the Foundation Year to be particularly radical.

"It had always been my hypothesis that the point of education was to learn how to think better, not to learn content. Most schools work on the basis of 'if we teach content, the thinking will exist by osmosis.'" Minerva "teach[es] thinking for its own benefit. Content will only be a vehicle for how to think better," she says.

Throughout the program, Minerva bolsters a student's education with career development. Every cohort has a coach that holds 1:1 and group sessions with the students, preparing them for the workforce and supporting them in their job search, through employer outreach and matching.

Underpinning this entire experience is what Minerva calls Habits of Mind and Foundational Concepts, "HCs." Habits of Mind are "cognitive skills that with practice come to be triggered automatically." For example, the habit of "distinguishing between categories and types of information to determine source quality" triggers a mindframe and set of actions that allow sound judgment about information sources. Foundational

concepts are "fundamental knowledge that is broadly applicable," Mike explains.

One of these HCs is called #levelsofanalysis, which pushes students to "look at things on an individual level, group level, societal level, etc," Rory explains. The "idea of drilling down into individual effects of a decision and being able to drill up into societal-wide impacts of any action" is something Rory hadn't really considered before going to Minerva.

"I had been super into this idea of radical education, deconstructionism," Rory says, believing that the existing education system needs to be completely overhauled. Levels of analysis taught her to introduce "a lot more nuance in [her] thought processes," so that now she believes that making change is "much less 'viva la revolución' and much more grassroots, hitting stuff from different angles."

All of these components combined address five areas of student needs that Mike has identified. This includes learning self-management and well-being, such as how to take care of oneself when living away from home, time management skills, and how to cook and shop. The next is 'character and responsibility,' and the third is interpersonal engagement—building a community and making one "feel seen, understood, and able to contribute." Next is global and cultural dexterity, learning how to engage with people from different cultures, and the

last is professional readiness. Together, these skills cultivate the whole student, helping them become leaders, innovators, broad thinkers, and global citizens.

Minerva's admissions process is also distinct from other institutions and includes an online application, a series of challenges which includes a Q&A and the opportunity to share accomplishments. The interview process is both live and automated, with a range of pre-recorded questions. The challenges also feature what Ben calls a "bizarre puzzle activity," which is part of Minerva's cognitive assessment tools. Ben explains that this application "levels the playing field."

"We don't care about who your mommy and daddy are," he says. "There's no place to write it. There are no artificial quota systems." Minerva doesn't even have sports, as college athletics can often become a "backdoor for wealthy people."

Minerva doesn't decide who to accept based on finances. It's a "for real, truly needs-blind admissions process." And even though the tuition is much lower than other universities at under \$14,000 a year, nearly 80% of the students are on financial aid.

Ultimately, the objective is to prepare students personally and professionally to become meaningful contributors to society as global citizens. The question that drives Ben and Minerva more broadly is, "how do we create holistic humans?"

INSIDER TIPS

Articulate a clear purpose for an education: Following Minerva's approach requires going back to basics: into both the history of education and the way learning works. One of Ben's primary inspirations for the Minerva curriculum came from the history of liberal arts education. Returning to the foundations and understanding the purpose of an education, Ben suggests, helps build a clear foundation for future learning endeavors.

Pairing that with a return to how learning works—Minerva used the latest research from the science of learning to develop its Habits of Mind and Foundational Concepts—helps complete the academic picture. Ben suggests starting with his compendium of primary literature on this topic, *Building the Intentional University*.

Borrow from others: From there, edu entrepreneurs shouldn't be afraid to copy what has worked elsewhere, not reinvent the wheel, Ben says. Minerva shares its own ingredients for success in Minerva Days hosted around the world, teaching institutions about its curricular structure, pedagogy, and feedback mechanisms.

Expect to evolve: The final phase, Ben suggests, is continual evolution. Once the enterprise is up and running, change and evolution will come naturally.

UNIVERSITY OF UTAH: LASSONDE ENTREPRENEUR INSTITUTE



POINTS OF INTEREST

- University of Utah's Lassonde Entrepreneur Institute is a **living learning community** for students of all years who want to **develop and launch their entrepreneurial endeavors**. Students don't just live and work on their projects at the Lassonde Entrepreneur Institute—they take workshops and learn from experts on how to develop their enterprises, and lead many of the Institutes's initiatives and programs in paid employee positions.
- The Lassonde Entrepreneur Institute facilities promote flexibility and creativity, and feature work spaces, a cafe and lounge areas, and tools and materials that students can use. It is **open 24/7 for students to prototype and bring their ideas to life**, because sometimes great ideas happen at 2AM.



Photo credit: Lassonde
Entrepreneur Institute at the
University of Utah

YOUR GUIDE



Troy D'Ambrosio
Assistant Dean &
Executive Director



The Lassonde Entrepreneur Institute at the University of Utah came together through serendipity. Troy D'Ambrosio was selling his company and working on another business idea. At the same time, he was on the Advisory Board for the university's business school and the Dean asked him to meet with Pierre Lassonde, a businessman and philanthropist who wanted to create an entrepreneurship program.

The program launched in 2002 with a \$30,000 donation from Pierre Lassonde, an alumni of the David Eccles School of Business. Lassonde eventually endowed the program with a \$12 million gift. Fast forward ten years, and Lassonde offered to give them another \$13-15 million if they could come up with a plan. He didn't want them to simply erect a building for him, he wanted to create something student-focused, entrepreneurial, and interdisciplinary.

Over the course of one year, they interviewed 500 students who had participated in their programs, asking them what would have helped them be

more successful. The students had three overarching comments: they wanted to meet other smart people on campus, they needed a place on campus to build prototypes, and in some cases, they had an operating business with no place to run it.

The team, which included Troy, Pierre Lassonde, and Jack Brittain, the Dean of the David Eccles School of Business, took inspiration from other institutions, as well as spaces outside of academia, such as WeWork.

"Is it open 24 hours a day? My most creative time is 2 AM." That was the kind of input Troy got from students. Keeping this in mind, he realized that a residential space could easily be made accessible at all hours.



LASSONDE STUDIOS' MAKE SPACE (MAIN FLOOR)

Photo credit: Lassonde Entrepreneur Institute at the University of Utah

Borrowing from Silicon Valley, where people live, work, and raise money, Troy realized that they could effectively build a dorm in which students live, work, and learn. They could also charge rent, which would help sustain it financially.

Based on this feedback, University of Utah's own version of a living learning community was born as the Lassonde Center for Entrepreneurship, and later became the Lassonde Entrepreneur Institute in 2014. Troy notes that "going a co-curricular route wasn't about trying to take the path of least resistance—the donor wanted to do this." Lassonde explicitly wanted to create the best student experience possible and

"enhance the experience for student entrepreneurs."

Troy says that it's "hard to over-emphasize how the space transformed the campus." It is open 24 hours a day and has its own café—elements Troy didn't realize would be so instrumental in the Institute's success. Students who want to work late don't have to be alone; they'll always find other people working, which is not only positive from a safety perspective, but also creates a sense of energy that people work off.

And while the Housing Department is rule-driven, the Institute is not. The tool room, which has thousands of dollars of equipment for example, has no official check-in or check-out to use it.

Even the building itself is unique: there are different style dorms and every floor has a maker space.

"It looks like a home or a club—a place you'd want to hang out," Troy says. Students from every major, from an incoming freshman to a 40-year-old PhD student, are welcome to live and work there, driving interaction between very different people.



LASSONDE STUDIOS' MILLER CAFÉ (MAIN FLOOR)

Photo credit: Lassonde Entrepreneur Institute at the University of Utah

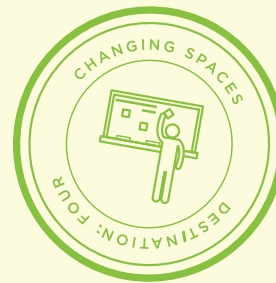
In the years since, the Institute has also launched Lassonde + X, which is an entrepreneurship major for students to create their own business opportunities and ventures, while focusing on value creation, passion, and action. Students from a variety of majors—beyond only those who study business—integrate entrepreneurship into their studies. Anyone from an engineering major to a dance major can build a project off of their passion, developing skills and gaining credit in the process.

There are a number of elements that helped get the Lassonde Entrepreneur Institute off the ground, according to Troy. First, they had a donor who was willing to give the money to fund the program. The Dean and President, in turn, were open to taking risks. Troy himself also already had a successful program on commercializing businesses. The buzz from students helped overcome any potential objections, and the fact that the Institute was not involved in research or curriculum meant that it didn't step on the toes of anyone in the academic space.



LASSONDE STUDIOS' SHOP (MAIN FLOOR)

Photo credit: Lassonde Entrepreneur Institute at the University of Utah



INSIDER TIPS

Orient around the student experience: The Lassonde Entrepreneur Institute is exclusively focused on the student. Lassonde and the Dean directed Troy and his team to “create the best student experience that you can. Give them resources to be entrepreneurs.”

For them, that means meeting students on their schedule and timeframe, “not expecting students to have to morph to meet the program’s requirements,” Troy notes. “It’s a very student-centered model.”

Engage students as stakeholders: “Let students have a lead role in creating the program, content, and experiences,” Troy adds. This helps keep things fresh, while providing a stronger learning experience for students.

And if he were to start from scratch today, Troy says he would prioritize the launch of a milestone funding program. “A little bit of money goes a long way in the hands of a student entrepreneur—and creates momentum and energy,” he says.

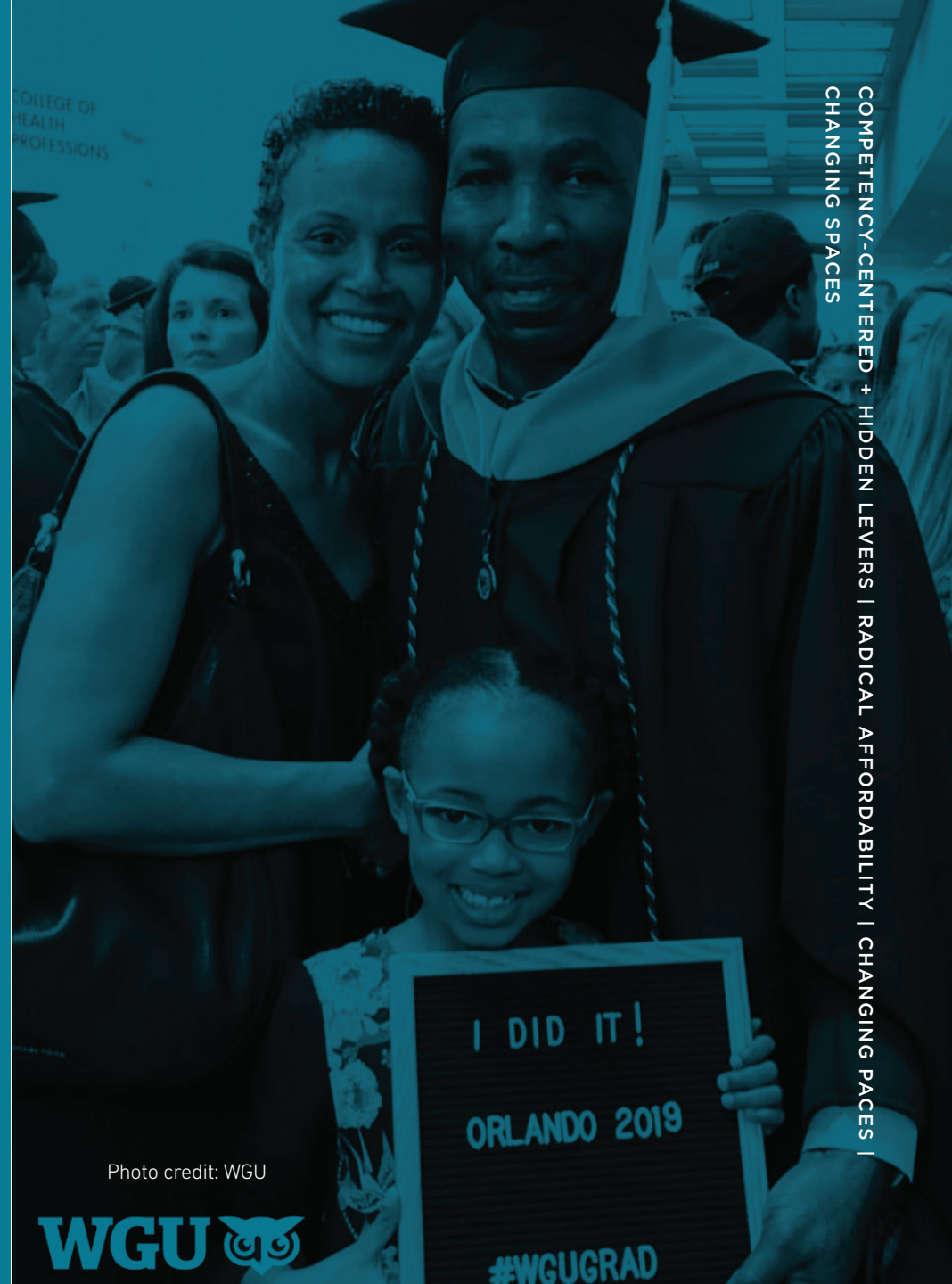


WESTERN GOVERNORS UNIVERSITY



POINTS OF INTEREST

- Western Governors University (WGU) is an online, non-profit university known for its **competency-based education model**. Serving mostly adult learners, WGU provides access to high-quality, affordable, and industry-relevant Bachelor's and Master's degree programs.
- In WGU's disaggregated faculty model, **faculty have specialized roles and work with students individually**, serving as either program mentors, course instructors, evaluators, or curriculum and assessment developers. This is a key component of WGU's 360-degree Community of Care, which includes enrollment, support services, financial aid, and career services, and helps students through the entire learning journey from application to graduation and beyond.
- By focusing solely on student learning and success in an **online environment, eschewing the need for a physical campus, WGU is able to keep costs down**. Tuition and fees are typically under \$7,000 a year for students.



COMPETENCY-CENTERED + HIDDEN LEVERS | RADICAL AFFORDABILITY | CHANGING PAGES | CHANGING SPACES

Photo credit: WGU



Photo credit: WGU

YOUR GUIDES



Marni Baker Stein
Provost and Chief
Academic Officer



Sarah DeMark
VP of Program
Development

When many people think of higher ed, they are likely to imagine lecture halls, a quad, a cafeteria, and dorms. Western Governors University (WGU) has none of these. It doesn't even have conventional classes in a lecture hall or classroom.

In 1995, a group of governors were discussing the challenges of their overstretched state universities. Their discussion led to a brainstorm of ways to address these growing concerns—ballooning enrollments amid limited budgets—and realized that the birth of the Internet might provide an opportunity.

Together, they devised the idea of what would become Western Governors University: an online, non-profit university that allows students to pursue an education anywhere, anytime.

The bipartisan group of founding governors decided that to best prepare students for their careers, the education would be competency-based. "Competency-Based Education" (CBE), an approach WGU pioneered and is now used in colleges and universities across the country, focuses on skills and learning rather than credits and amount of time spent on a topic.

Expanding access to high-quality higher education is central to WGU's mission. Seventy-three percent of WGU students work full time and 70% receive financial aid. Nearly three-quarters are classified as underserved in one or more of the

following four categories: ethnic minority, low income, rural residents, or first-generation college students. Many are already working in their field and hope to further advance their careers. A degree will help—but they also have less tolerance for taking classes that "they don't see as being relevant and helping them advance," Sarah DeMark, VP of Program Development, notes.

With a deep knowledge of its intended audience, WGU focuses on addressing students' needs. That means not trying to do everything itself. Instead, it pulls in the best resources—no matter what. This applies to the learning systems WGU uses, but also to how it organizes its faculty, in what it calls a 'disaggregated model' whereby faculty members are divided into roles such as instruction or evaluation.

What does WGU's competency-based learning look like?

Students pursue an area of study in one of four colleges through online learning resources, such as courses, e-textbooks, library services, and web-based tutorials. The courses are not lectures or videotaped, and many are curated from third-party vendors. "We are learning management system [LMS] agnostic," Sarah notes, "so we can leverage different content and platforms to bring the best to our students." Any time WGU wants to offer a new course they scan the market and bring in whichever resource will



be best for their students and student outcomes. If the existing courses have gaps, they'll work with vendors or develop something in-house to fill them.

Buying the LMS content from third parties also helps WGU keep its costs down. "To be able to outsource allowed us to keep costs low in terms of what we were doing with design and development," Sarah notes. With the knowledge gained from working with numerous digital learning resources, WGU is developing a new platform that will enable a seamless student experience, allowing the university to scale further as changes such as stackable credentials and skills-based transcripts shift the landscape of higher education.



ORLANDO COMMENCEMENT FAMILY, ONE OF SIX PER YEAR

Photo credit: WGU

"Our curriculum is 100% online and 100% asynchronous," Sarah adds. There are no set course or lecture times and students "move through courses at their own pace." Once they move through a course and demonstrate mastery of the material through an assessment, they can move onto the next one.

WGU cares about the skills and competencies that a student develops—not how the skills and competencies are acquired. Students can accelerate through courses that cover knowledge they already have. This is particularly valuable as most of the students are working adults who already have some college and work experience, so they can obtain their degrees more quickly and with a lower price tag than other similar programs.

"We don't require or prescribe how students learn," Sarah says, "but we do provide learning resources—they have everything they need to be successful." As far as WGU is concerned, students could even learn by "talking to a brother who is an accountant." They can use whatever resources they want as long as they master the competency.

One student Sarah mentions was pursuing a B.S. in accounting. She had already spent 15 years working as a bookkeeper but needed the degree to move forward in her career. "Given all the experience she was bringing into her courses, there were many she was able to move through quickly because she was demonstrating competence from previous work," Sarah says.

WGU's approach enables each student to create a personalized experience, moving at the appropriate pace for them. The student completed her degree at WGU in just nine months.

"We are 100% student-focused," Marni Baker Stein, Provost and Chief Academic Officer, adds. "WGU is committed to measurably increasing social and economic mobility for every one of our students and their families. There is no other part of our business, no other part of our mission—that's it."



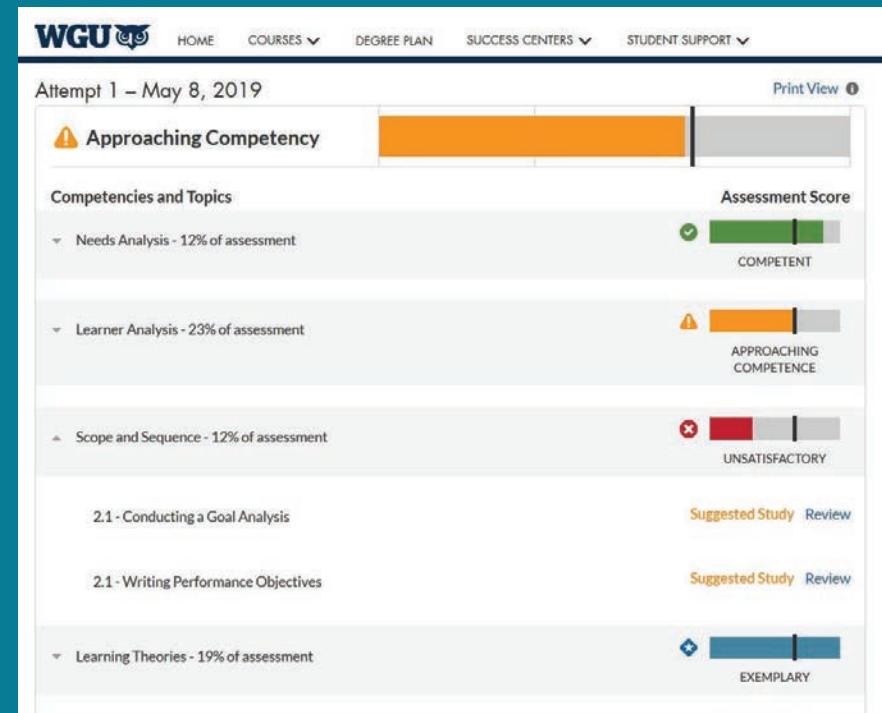
AT A GLANCE: CORE COMPONENTS OF A WESTERN GOVERNORS UNIVERSITY EDUCATION

MASTER CURRICULUM MODEL

WGU relies on a master curriculum model, which Sarah describes as “one curriculum that all faculty support.” There is one set of learning resources and one set of assessments, so every student receives and demonstrates competency objectively. They also have a personalized experience, allowing them to accelerate in areas in which they are already knowledgeable and spend more time with resources and one-on-one instruction to develop a stronger understanding of new or unfamiliar material to achieve competency.

“If you think about [a] biology [course] in a typical university,” Sarah says, “everyone might have the same general outcomes of what they expect a student to know, but maybe one teacher really likes plants and maybe one really likes animals.” That means that each student will have a different experience based on the course they take and the instructor who teaches it. At WGU, they don’t have multiple sections of a single course, which allows them to “better scale what we’re able to offer and to be able to leverage the insights we’re getting from data,” she adds.

With a master curriculum, instructors teach the same subject matter and students learn the same material, “not just streamlining the student experience, but also the data that WGU collects to see what is and isn’t working.” That data, in turn, “allows us to be very agile in terms of making continuous improvements,” Sarah notes.



WGU COACHING REPORT

Photo credit: WGU

ASSESSMENTS

Assessments are critical to ensuring each student’s success. Sarah explains that “assessment is truly the backbone” of making a competency-based education work. It’s about “being able to leverage the skills in competency-based certifications on a bigger and more meaningful personal scale.”

To determine whether students have the competency, WGU runs

performance-based and objective assessments. The latter are typically scored by machine. The former are blindly assessed by evaluation faculty who are separate from teaching faculty. This, Marni notes, “takes subjectivity out of the process. They assess student performance against rubrics designed by our psychometricians and then give targeted feedback to students about where to go back on their learning path.” The process takes faculty bias out of the equation.

DISAGGREGATED FACULTY MODEL

Unlike in traditional universities where a faculty member both develops and teaches the curriculum and assesses the students’ learning, WGU faculty are disaggregated by roles and are responsible for just one or the other. This “allows individuals to do what they do best—they don’t have to be a jack of all trades,” Sarah notes.

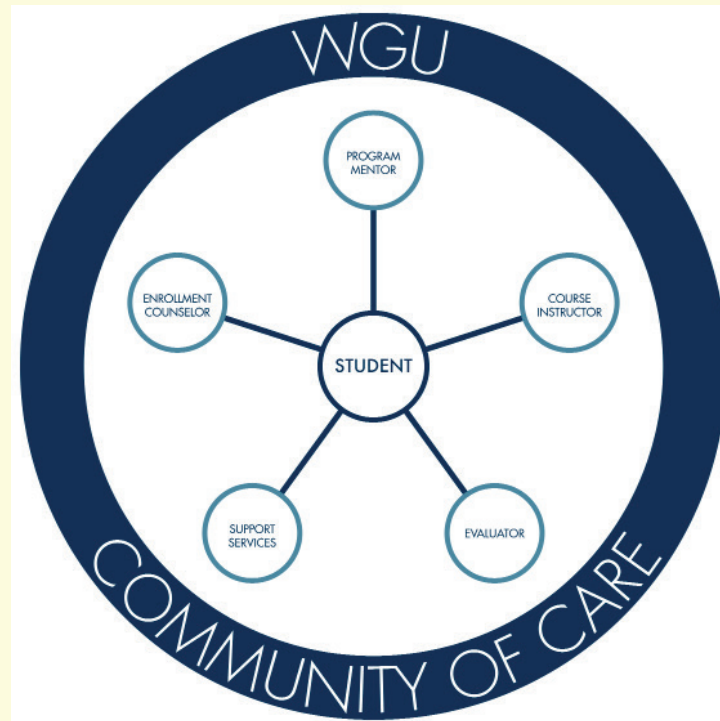
Some faculty members specialize in instruction and support, others in evaluation. Yet another group of faculty members develop curriculum and assessments. Keeping each of these functions separate allows them to “maintain the integrity of the competency-based model,” Sarah says.

Students are also assigned a program mentor on their first day, a faculty member who stays with them for the duration of their program. This person, who has advanced academic and

professional experience in the field of study, provides instruction at the program level, walks students through expectations, coaches them, and helps them with student success skills like motivation, resilience, and time management. They help the student plan their program, figure out when and which courses to take, and ensure that they’re appropriately paced.

Course instructors, on the other hand, are a “deep-dive resource.” They teach, instruct, and interact with students who are enrolled in a specific course within a program. They also respond to alerts that WGU has built into its courses, called “triggers and interventions,” which are instigated by student behavior.

“If a student hasn’t engaged after a few days,” Sarah explains, “there will be a notification on the course instructor’s dashboard to say that the student hasn’t interacted and they might want to reach out.” The triggers and interventions also notify the instructor if a student isn’t performing well or has not passed an assessment, nudging them to engage with the student, encouraging them and providing resources to enable a successful outcome.



THE “WGU COMMUNITY OF CARE” SUPPORTS THE STUDENT THROUGH THE ENTIRE EXPERIENCE FROM APPLICATION TO GRADUATION AND BEYOND

Photo credit: WGU

WGU also keeps costs lower than many online universities, charging around \$3,000 to \$3,500 per six-month term, or around \$7,000 annually. Tuition is a flat rate, not per course or credit, so students who accelerate spend less. This affordability is facilitated in part by WGU’s partnerships with third-party content providers, but also because the school

has lower overhead—it has no campus, classrooms, or sports facilities to pay for. The teaching faculty does no research and most work remotely.

These elements enable WGU to scale its model: in mid-July, WGU awarded its 150,000th degree and there are currently just over 115,000 students enrolled.

“All of our student-facing services or products, from curriculum to the faculty model to the student support system, are designed so that we are making sure that we dynamically understand who our students are throughout the program, giving them the right services at the right time to make their next step,” Marni explains. Through each of these touchpoints, students constantly receive reinforcement as to why what they’re studying is important and see how their studies could be applied to a job. In fact, many courses require students to integrate experiences from their current or previous workplaces.

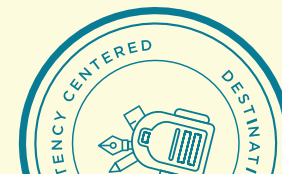
“With WGU, the core of our mission is to optimize the experience of every student. So the culture that we have built around that over the years is simply to solve that problem,” Marni says in reference to WGU’s focus on students and their successes.

“We think of [innovation] as continuous improvement,” she adds. “That gives us an advantage because these things that might have been thought of as crazy models—not might, they are—they’re not thought of as crazy models here. They’re thought of as solutions.”



ONE OF THE MANY WGU STUDENTS WHO GRADUATES EVERY DAY DUE TO MONTHLY, ROLLING TERM START DATES AND COMPETENCY-BASED EDUCATION

Photo credit: WGU





INSIDER TIPS

Orient around student needs: WGU is partial to prototyping, as its innovative model might suggest. Underpinning this approach is a laser focus on the student and the student's needs. "We get student population data that we want to affect and make the case for student success ROI," Marni explains. She suggests this as a first step for those looking to make change at their home institution.

Focusing on this data, identifying the learner, and the success metrics have allowed WGU to assess and decide in what direction the university wanted to go. "The most important thing isn't the model," Marni adds. "It's having an impact on student success outcomes systematically."

Define your business model: After the administrative team identified the learner population, the metrics they wanted to drive, and developed a hypothesis, they created a business model—which Marni notes is an often-skipped but critical step. "How you create a business model and implement it is such an important learning piece of this process that helps define what you want to do."

Lead with the why: Speaking to those who want to implement CBE programs in particular, Marni notes that it was critical that the team knew why that would be their focus. "It's very hard for many faculty to get used to. You have to make sure that you have faculty who could execute design and really take the prototype to market, establish it, and who are committed to it long term. At the end of the day, you might have perfect student targets, but if you don't have the front line, you can't get them totally on board and excited about it."

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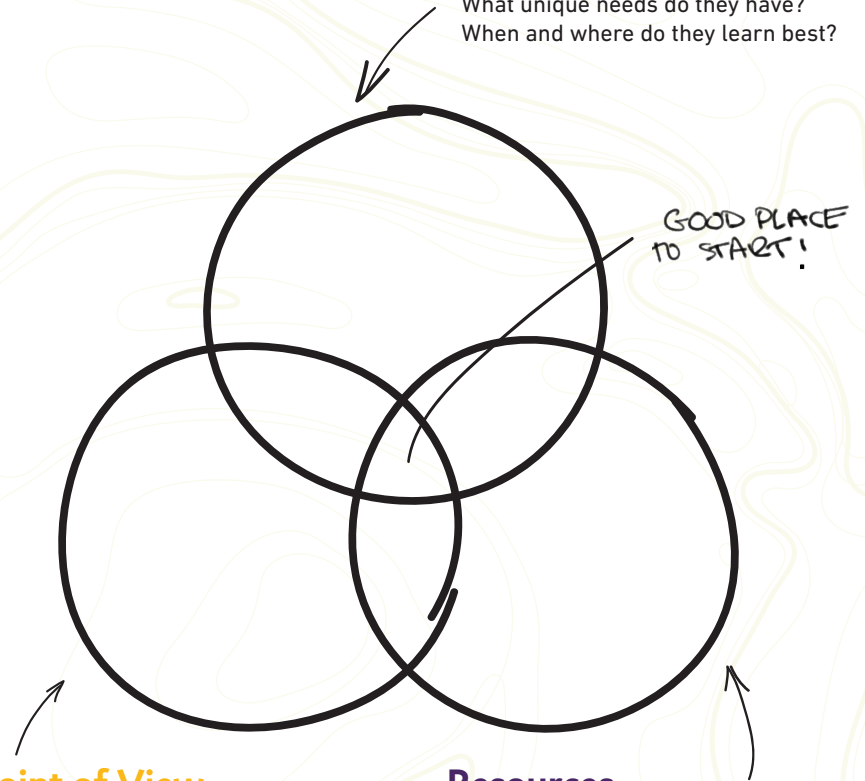
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MAPPING YOUR INNOVATION INTENT

Students

Who are my students?
What unique needs do they have?
When and where do they learn best?



Point of View

What are my values & beliefs about learning? About a college education?
What will my students be uniquely equipped for after graduating?
What will they be known for?

Resources

Where is my sphere of influence strongest? In what arenas do I have decision-making authority? Who are collaborators in my circle? What resources do I have access to?

