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Innovative Education: The President's Progress Report

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Innovative Education

The President's Progress Report







How can academic leadership create a culture of INNOVATION? How can faculty more effectively convey their KNOWLEDGE? How can students learn the skills, traits, and process to become future INNOVATORS?



Introduction

Igniting the imagination, fulfilling a vision

While leaders in all sectors recognize the need for innovation in product, process, and services, the word innovation has many meanings. It is perhaps the most ubiquitous word in both business and university lexicons today, yet there is seldom a common meaning of the term. Everyone wants an "innovative business model" or an Innovation Center on campus, but what does it mean?

In higher education today, there is an obvious question as to whether the traditiona classroom lecture, even with PowerPoint, video, or other technology, is the most effective pedagogy.

Teachers know that their students readily use their search devices to find needed information and often tune out lectures while surfing their computers or hand-held devices. Given this new reality, what is the best way to teach subject knowledge today? This was the inflection point where we began to consider truly innovative teaching, not aiming to replace core competent subject matter but to convey it differently.

In the following pages you will see how some of our faculty developed new concepts and tools of innovative teaching, in new, innovative facilities.

This rethinking of innovative teaching came after we concluded that it was vital to teach innovative skills and traits to each student because

innovation in the workplace will be increasingly important in the future. So we asked ourselves a series of questions: Can we teach all students to become innovators? What skills must they develop? And can we assess the learning of these skills and traits?

We believe creating innovators requires more than teaching about entrepreneurship or differently designed products. It should be an education of the innovation process that enables graduates to make innovative advances in their future chosen fields, regardless of their major. And in that education about the innovation process, students will discover something that Walter Isaacson observed in his bestselling book, The Innovators, that even in technology, innovation is almost never a single person achievement.

While there is not yet a universal definition of innovation, there's a body of knowledge about the subject that has grown exponentially in recent years. Some of the early thought leadership

came out of IDEO, a California industrial design firm that was formed in 1991. They started out designing the computer mouse for Apple, the whale in Free Willy, and healthcare imaging machines for GE. And they realized there was a methodology in the way they did industrial design: it was actually a creative problem-solving process. They shared their methodology. Now IDEO's "design thinking" enables businesses and academic institutions to use their pedagogy for institutional purposes. For higher education, this doesn't mean changing core academic content. Innovation is not an academic discipline but it can be a skill process and it should mean overlaying core competencies with the traits and skills of innovation needed in future graduates.

IDEO's model for creative problem-solving has six steps: observation, ideation, rapid prototyping, user feedback, iteration, and implementation. Coincidentally, Bryant University has gone through six steps to create a culture of innovation, a culture focused on innovative teaching and creating innovators.

Here's a quick history of how innovation has evolved at Bryant in recent years. We hope you will share with us your own experiences with innovation at your college or university.

STEP ONE: Five years ago, we began teaching every freshman "design thinking" in a 56-hour "boot camp" immersion experience. This is our I.D.E.A. program, explained on pages 9-12.

STEP TWO: We then began to apply design thinking as a first step to innovation to envision how our faculty, in a new world of technology, could go beyond PowerPoint presentations to a fully integrated pedagogy of experiential learning in the classroom. This effort needed faculty buyin, of course, in order to succeed. We started with one prototype classroom ("The Ideation Lab") and some adventurous faculty who had participated in the I.D.E.A. program. The classroom itself wasn't too futuristic, but the core group of faculty using the room were known for teaching innovatively. They experimented, evaluated results, and made significant improvements.

STEP THREE: We created an additional prototype classroom in our Bello Center and Library. This was more sophisticated in its use of wireless technology, with moveable tables and chairs for easy reconfiguration of the space for team tasks.

STEP FOUR: Throughout the pilot projects we had pioneering faculty who taught innovatively, had been part of I.D.E.A., and were ready to imagine a whole new building that would reflect the lessons they had learned. We wanted an active, fluid learning environment - space that was flexible for future evolution, open and transparent; with light and moveable furniture, and state-of-the-art technology tools. We envisioned group integrated experiential learning in flipped classrooms, and many other possibilities.

A faculty committee helped ensure that the design of the new classrooms was exactly how they wanted to teach innovatively. Those who wanted to teach in the building had to submit

their syllabi to a committee on how they would innovatively teach their courses. The teacher load was divided between our College of Business and the College of Arts & Sciences, with students in all four years of classes participating equally in use of the facility.

In September, 2016 the Academic Innovation Center came online at a cost of \$31.5 million, after 16 months of construction. EYP Architecture's Kip Ellis did an incredible job in designing the facility. It inspires the faculty and students who use it, and it was selected by College Planning & Management magazine as the Grand Prize Winner in its Education Design Showcase issue.

The facility was part of \$75 million in new construction at Bryant, adding 200,000 square feet to the campus facilities blueprint. And, as you'll see in photos, the AIC added a new dimension to academic life.

STEP FIVE: We recognized that our whole community should have a rich culture of innovation. We created many programs, like "Faculty Without Borders" and the Sophomore International Experience, which are featured in the following pages. One initiative was an event in the spring called REDay, Research & Engagement Day. It's an opportunity for faculty and students to share things they've done: a research project, independent study or classroom activity. It is that kind of sharing that helps build a community around teaching.

"Bryant's culture of success inspires continuous innovation in what we teach and how we teach it."

> - RONALD K. MACHTLEY Bryant University President

STEP SIX: We decided that our goal was not just to teach innovatively but to develop within each student the innovative traits, skills, and qualities that will make them innovative leaders. Innovation is not just teaching them how to design a product or engineer a process or develop the next IT venture that can achieve an IPO; it is a way of thinking and collaboration and, ves, failure.

In creative collaboration, we crafted a definition of that elusive word, innovation: "The process of creating and implementing an idea that generates significant positive change that the user values." The last part is crucial: Innovation must be something that the user values, not merely a good idea. We then identified five traits of innovators: *Curiosity and Creativity;* Integrative Thinking; Collaboration; Connectors; and the Perseverance and Grit to embrace failure as a source of future success. Our students are learning those defined traits as well as the core of academic courses. And, as we all know, in higher education we must develop the tools to measure and assess. We have begun the process of determining how we will assess accomplishment in this area, including whether and why students learn more of the academic content through innovative teaching rather than the conventional lecture method.

We have not found, nor do we expect to discover, an all-purpose single way of teaching that is optimal for all. That's not realistic, nor desirable. The challenge of educational innovation

is for teachers to think anew about their unique disciplines and how they might deliver knowledge in different, more effective ways. That challenge to be innovative is why our faculty feels reinvigorated. They are enjoying the creativity and freedom that inspired them to teach in the first place.

Innovation is a continuing journey, of course. There are countless steps ahead of us as we learn, teach, plan and build. But at Bryant we reflect on recent progress with satisfaction. We honor our faculty for teaching innovatively and we take pride in our students becoming true innovators.

I hope this progress report is of interest to you, and that together we can share the lessons learned along our journey.

In that spirit, here are some of the initiatives that define innovation at Bryant University...

Sincerely,

and K Machthey

Ronald K. Machtley Bryant University President 1996-present





Innovative Initiation

Innovation and Design Experience for All

"Bryant's First-Year Gateway, of which IDEA is a key component, provided a "reset" moment. *Launching the Gateway brought our faculty* closer together. It marked the transition from who we were to who we would become."



Bryant's immersive and uniquely integrated curriculum, with a focus on international education and innovative models of teaching and learning, has garnered national recognition by organizations including the Davis Foundation and Hanover Research.

Our innovative programs, including IDEA, the Sophomore International Experience, and at our campus in Zhuhai, China cultivate a global perspective.

The result of close collaboration by faculty from all disciplines, in both the College of Arts and Sciences and the College of Business, the

Gateway is a 13-credit program for all first-years. They examine Global Foundations of Character and Leadership, and Global Foundations of Organizations and Business, along with a writing course, introduction to literature, and IDEA.

"Students see dramatic improvement in their cultural awareness and writing proficiencyboth essential for success at Bryant and beyond."



Since joining Bryant University as provost in 2015, Sulmasy has accelerated the evolution of an academic program that was already breaking boundaries.

Developing a global perspective is key to the experience shared by all Bryant students. As a Fellow in Homeland Security and National Security Law for the Center for National Policy in Washington, D.C., and National Security and Human Rights Fellow at the Carr Center for Human Rights Policy at the Harvard Kennedy School, Sulmasy had published and lectured widely. He recognized immediately how programs such as Bryant's Sophomore International Experience and First-Year Gateway Experience established a crucial foundation of cultural understanding.

Prior to joining Bryant's executive leadership team, Sulmasy was chair and designated dean of the Department of Humanities and Professor of Law at the United States Coast Guard Academy.

Bryant's provost is responsible for all academic and research programs within the University's College of Business, College of Arts and Sciences, and School of Health Sciences.

Sulmasy plays a key leadership role in the implementation of Bryant's Vision 20/20 strategic plan, reviewing undergraduate and graduate education curricula to ensure increasing excellence.

> — GLENN SULMASY, J.D., LL. M. **Bryant University Provost** and Chief Academic Officer

Innovative Initiation

The I.D.E.A. program

The Innovation and Design Experience For All (IDEA) program is an intensive three-day experiential learning program for first-year students. The 56-hour "boot camp" introduces students to the design thinking process and challenges them to apply it to real-world problems.

"We start with a bunch of projects," explains Mike Roberto D.B.A., management professor, author, and the pioneer who conceived the idea of IDEA. "In the spirit of design thinking, you frame a question as 'how might we open up pos*sibilities?' How might we reinvent libraries for* the 21st century? How might we help shopping malls compete with Amazon? How might we redesign hotel lobbies to enhance guest satisfaction? How might we help after-school programs better cater to poor families and children? And then we go out and find locations that have to do "We start with a series of hands-on with that prompt. This year we had 34 projects.

"And every project we put 25 students on we call that a cohort. To that cohort, we assign *mentors: one faculty member, a staff member,* an upperclassman, and we also recruit alumni to be mentors.



activities, like games so they're not hearing lectures. And then we teach them how to go out and observe people in their natural environment because that's what design thinkers do. They see what people do in their lives, in their homes, in spaces. So we teach them: What should you be looking for? What

are some of the traps you might fall into? What are the blinders you might have when you observe?

"Then we send them out into the field on buses that go all over the region, to do their own original research, observation and interviewing. They come back; they digest that. We teach them how to develop insights and conclusions based on what they did. Then they brainstorm. We teach them how to do real, effective brainstorming. Then they do what's called storyboarding: picking some of their ideas and sketching them out. Then the alumni come in, and they have to pitch their storyboard. And alumni tear it apart. Of course they do; they are real-world people. The students are hearing from experts.



"After they get the feedback, they begin to prototype. We buy boatloads of material. We unleash them. They're working late into the night like they do in Silicon Valley – building models of what they have conceived as an innovation.

"On the last day, there's a trade show. They have to show their idea creatively, and they're not allowed to use PowerPoint. This year we had 163 judges; about 100 were alums *There were other members of the community,* members of the Bryant administration and faculty, all wandering around for two hours. And the students had to pitch their idea and explain their process. At the end, judges rate each team. Winning teams earn a prize, but everyone feels good and celebrates. It's an intense, exhausting, fun three days."

The program has several learning objectives. First, students learn to apply the design thinking process to come up with creative solutions. Second, they develop skills in brainstorming, as well as constructive debate with other team members. Third, students learn how to communicate their ideas clearly and concisely.

"IDEA pushes students out of their comfort zone, to be better learners," observes Madan Annavarjula Ph. D., Dean of the College of Business. *"It helps them think in a three*dimensional space, in a practical sense, collect information, organize it, prototype it — if it's a failure, pick up the pieces, and run with the ideas that can actually take you toward success.



Energy and engagement are hallmarks of Professor Roberto's award-winning teaching style. "I have a lot of enthusiasm and hope it's contagious," he says.

An author and **expert in decision-making**, leadership, and large-scale organizational failure. Roberto creates a culture of innovation in his classroom through debate, engaged discussion, video, and the use of interactive business simulations. One in particular – a web-based simulation he co-developed using the dramatic context of a Mount Everest expedition to reinforce student learning in group dynamics and leadership – received the 2011 Massachusetts Innovation and Technology Exchange Award for best eLearning solution.

The real-world business skills Roberto brings to his undergraduate and graduate students come from his years of consulting and leadership training at such firms as Target, Apple, Disney, Coca-Cola, Federal Express, and Johnson & Johnson.

Roberto also directs Bryant's Center for Program Innovation, a catalyst for educational change. Its mission is to expand signature experiential learning opportunities and academic integration across disciplines, two fundamental elements of Bryant's approach to education.

> - MICHAEL ROBERTO, D.B.A. Trustee Professor of Management and Director, **Bryant University Center** for Program Innovation



" IDEA pushes students out of their comfort zone, to be better learners. They learn how to learn."

- WENDY SAMTER Ph. D., Dean, College of Arts & Sciences
- MADAN ANNAVARIULA Ph. D., Dean, College of Business

They learn how to learn. That's the whole idea behind IDEA."

Students learn that one weakness of traditional planning and decision-making is that it tends to move in a linear way from analysis to action. Design thinking is more non-linear and iterative. It emphasizes action early in the process through testing, prototyping, and experimentation – assessing the results of those efforts, and then iterating quickly to improve on the ideas. *Fail fast"* is the motto.

Moreover, students learn that the traditional approach may prove useful for incremental improvements, but may not be conducive to generating breakthrough innovations. Indeed, traditional planning, decision-making, and budgeting often stymie bold innovation. By contrast, design thinking is an effective way

to challenge existing assumptions and generate new ideas and initiatives. Large organizations like FedEx, Target, and Proctor & Gamble have embraced design thinking and achieved positive results.

Students also learn, however, that design thinking and traditional approaches are not mutually exclusive methodologies. Within an organization, they can be complementary. But design thinking provides a tool for reinventing products, services, and business models. And in an increasingly competitive world, innovation is usually necessary to avoid becoming the victim of disruptive innovation by others. The IDEA program provides students with hands-on experience working with these tools and techniques.



"The IDEA program is an immersive experience that engages the entire Bryant community, at all levels, including our alumni," explains Allison Butler, Associate Professor of Applied *Psychology and a member of the IDEA* leadership team.

"Students learn that they have the power to make change in their communities, and to move the needle. By learning the design thinking process in its five phases, they're empowered with a really useful tool that serves them well, no matter what they go on to do."

IDEA has many additional benefits: It helps each first-year student develop a relationship with at least one faculty member, staff member, alumnus, and upperclassman. Those mentoring relationships help the students discover their passion and have a more fulfilling four years at Bryant.

The result of purposeful collaboration by staff in our Student Affairs area with faculty, the program helps bring the first-year students together as a class, deepening their collective identity. Finally, the program also excites students about experiential learning, which is a major part of Bryant's curriculum







Innovative Facilities

A Climate for Innovation



Bryant has a tradition of facilities innovations that have unlocked our academic potential at key moments in our history. The Academic Innovation Center, opened in September 2016, is the culmination of years of planning and exploration.

All of the University's facilities are purposebuilt at a student-centered scale that fosters close connections. We have no large lecture halls, faculty suites are integrated to facilitate interdisciplinary inquiry, and the central Rotunda provides a campus crossroad and popular forum for sharing ideas.



Shown at left, Bryant's School of Health Sciences Physician Assistant Learning Center, opened in 2015, is equipped with a state-of-theart simulation lab. The George E. Bello Center for Information and Technology, below, replaces the traditional library.



sophisticated buildings that promote innova-

AIA, LEED AP BD+C

The Academic **Innovation Center**

The AIC is a unique facility that redefines the future of teaching and learning in higher education. Its active, immersive, and collaborative environment removes traditional physical and intellectual boundaries.

The Academic Innovation Center is the pinnacle achievement in a twenty-year period of growth and transformation at Bryant. It is the exciting result of an intensive design process to create a vibrant learning laboratory.

"Environment shapes behavior, so when you change the environment, things change," says Michael Roberto, D.B.A., Trustee Professor of Management. "You don't have to tell people what to do or how to do it. Just create the right space, and let 'em play."

The 48,000 square foot AIC reimagines the optimal environment for teaching and learning. Gone are the rows of seats and lecture dais that characterized higher education for centuries. Instead, flexible spaces, modular furniture and state-ofthe-art technology allow for a wide variety of innovative teaching and learning styles.

Leadership skills are developed through practical team experiential learning, design thinking through real-world simulations, rapid prototyping, social entrepreneurship and service learning projects, flipped class delivery, and more.

At the center is the light-filled Innovation Forum. The building also has five tiered classrooms, five flat classrooms, twenty-three breakout study rooms, lounge seating, a welcome center, and a café where students and faculty can take a break together from rigorous problem-solving.



The classrooms are designed to encourage the generating of original ideas and new knowledge. Abundant writable glass, whiteboard surfaces, and moveable furnishings complement smart technology wireless projection, wireless monitors at group collaboration stations, and docks for multiple devices such as laptops, tablets, and smartphones. The innovative learning spaces enable faculty and students to more effectively engage as they access worldwide data, create and share content, and view and critique solutions side by side.

Classes from both Bryant's College of Arts and Sciences and College of Business use the AIC.



"The AIC is a great catalyst," notes Bryant's Director of Faculty Development and Innovation, Edward Kairiss, Ph.D. "Teaching faculty have new opportunities to innovate, experiment, and develop new approaches to graduating the kind of students that are in high demand."

The AIC was awarded the national Grand Prize for outstanding design and architecture in the College Planning and Management 17th Annual Education Design Showcase.



"Good designs don't just happen," said CP&M editors. "They are based on exhaustive research and the study of best practices."

That was certainly true of the AIC. Bryant conducted significant exploration and benchmarking visits to some of the country's top institutions to gain insights into the latest innovations in designing educational, working spaces. And Bryant had two prototypes on campus, the Ideation Lab and Bello 102, which allowed faculty and students to test the mobile furniture and latest audiovisual capabilities that would be used in the AIC. A committee of faculty members advised on the project. They met regularly with the architect, project team, and other stakeholders on campus to express their

desires for this trailblazing new building. The dedication and collaboration of this committee proved vital to creating a building that fostered innovative, active learning for all academic programs at Bryant.

The AIC was completed sixteen months after the ground-breaking, on time and under budget, and incorporated many innovative features to ensure energy savings and efficiencies.

Kip Ellis, AIA, LEED AP BD+C, EYP Architecture and Engineering's chief architect for the project, explained some of the design thinking:

"We learned the importance of creating an environment that supports team-based learning so that groups of students can work





A recipient of Bryant's Faculty Innovation Grant,

Her current research focuses on higher education

— ALLISON BUTLER, PH. D,

together. They might share information on the large screen. Or they might get up from their seats and actually write their ideas on walls or map out strategies for a particular challenge that faculty have assigned. There isn't any one single thing that's right for every situation. The building was meant to provide the maximum flexibility for faculty to evolve the pedagogical content of their courses over time.

"We wanted to bring softened and filtered light into the center of the Innovation Forum so that all day long, students can work in an environment that has a very diffuse and comfortable light. And in the instructional spaces, we wanted to create light, open, inviting, and serene spaces that are like a blank canvas for faculty and students to do the kind of exciting things they'd like to do in those classes. *The spirit of Bryant is this open, inviting, and* very welcoming feel, so creating that light-filled space was essential to help maintain the character of this place. When I think about Bryant's beautiful buildings, like the Bello *Center, it has many luminous spaces. And it was* very inspirational for us. We wanted that sense of light and openness in the new AIC.

"In a way, it's an entirely new type of building because its primary genesis is the idea of collaboration. And that's what really distinguishes it from the outset.



"One of the significant design features is transparency. The building has a significant amount of glass inside. Glass is useful not only to transmit daylight through the center rotunda space, through the beautiful, curving glass front facade where you arrive at the building or the large and substantial windows into those instructional spaces, but the interior walls feature a lot of alass. Some of the glass walls, in fact, are movable.

"You might ask, why so much glass? The answer, in short, is to create both a sense of awareness and connection and to encourage collaboration, because it's a see-and-be-seen environment. It encourages you to want to be in the space because you can always be aware of what's happening. You get a real sense of excitement. When you move through the building, you can always see where your friends are or where a professor is. People are readily viewable.

"The glass also helps because it gives you both a visual connection and a sense of acoustic privacy. As people are talking about ideas or arguing why my idea is the best or whatever the conversation is, it allows students to raise their voice, get up, get moving, and put energy into the activity. But at the same time, they can see what's happening.

"These breakout spaces allow faculty to say to a group of students: now that you have your assignment, tomorrow you've got to come back with a strategy. How do we solve this problem? No one knows what the answer is yet, but they know they have a challenge. So when they move to breakout spaces, they can actually work in those rooms. They can use technology *if they want. They can simply get up and write* out things or diagram strategies. They can sit around a table. They can sit back in soft, comfortable seating, or some combination of all of the above. There's not one way for them to be able to work, and there's not one type of environment.

"One of the more interesting things about the AIC is it doesn't take a cookie-cutter approach to making all of those breakout rooms identical or all the classrooms identical. There's great variety. There's variety in the types of furniture in the spaces. There's variety in the amount of technology. There's also variety in the writing surfaces. We have whiteboards that are opaque

surfaces you can write on. But you can also write on the glass. So you have this wide variety, Faculty Building Committee experientially, of spaces for students to be able to work.

"The very nature of this endeavor was about the future. And what I found particularly exciting was the desire to innovate and do something entirely new, to be at the forefront of creating an environment that will encourage innovation, that will encourage new ways of learning."



Academic Innovation Center

Chair.

Michael Roberto, D.B.A, Trustee Professor of Management and Director, Bryant Center for Program Innovation

Kristen Berkos, Ph. D., Associate Professor of Communication

Jim Bishop, Ph. D., Professor of Mathematics

Allison Butler, Ph. D., Associate Professor of Applied Psychology

John W. Dietrich, Ph. D., Professor of Political Science

Maryella Gainor, M.B.A., Lecturer in Accounting

Jane McKay-Nesbitt, Ph. D., Associate Professor of Marketing

Jack Trifts, Ph., D., Professor of Finance

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Innovative Teaching

Pedagogy, Technology, Teamwork

"For example, we have students in my financial statement class who are evaluating and valuing companies. At the end of the semester they will make presentations. And we'll bring in a team of finance professionals, all Bryant alums, and they'll ask the students the same questions they'd ask Fidelity portfolio managers. So it's very real, very current and cutting-edge.

"Instead of standing in front at a podium, I'm circling around and coaching, I'm mentoring, answering questions, sometimes directly and sometimes not so directly so they have to grapple more. And with a group dynamic, it's

New technologies and creative collaborations have challenged the faculty to think beyond the traditional lecture format to more effectively engage their students. And they are doing just that.

"I used to think 'lecture' was a synonym for teach," says Jack Trifts, Professor of Finance. "I've taught at three universities and won teaching awards at them, so I'm pretty good at what I do, but my teaching today is fundamentally different than it was ten years ago. I don't lecture in class. I record video lectures and post them online so students can watch them **before** class. Taking the lecture out of the classroom frees up time to do much more active learning kinds of things.

so different. There's more energy in the classroom. Students enjoy it. In finance, we are technology-driven. We installed a dozen Bloomberg terminals on campus. Bloomberg is the gold standard for financial information. A bunch of us are reworking our courses to be built on that. And to be able to send graduates who are already Bloomberg-certified into the *investment industry, well, that's really cool.*

"Since our faculty are so heavily engaged with preparing and delivering classroom instruction," notes Bryant's Director of Faculty Development and Innovation Edward Kairiss, Ph.D, "we try to create opportunities for them to step out of that intensive environment to rethink how they might do something new. For example, we have workshops on teaching where we typically bring in someone from the outside to present a fresh perspective or new idea about some aspect of pedagogy. And we might couple that with advance reading. Last semester we read and discussed James Lang's book, Small Teaching: Everyday Lessons from the Science of *Learning*, and he came in for a workshop.

"Another approach that we love is what we call



An expert with more than 25 years of experience in innovative teaching and learning, Kairiss came to Bryant from Yale University, where he served as Director of Strategic Projects for Yale's Center for Teaching and Learning. He led the development of Yale's first Learning Management System, and formed the Instructional Technology Group to support all aspects of the use of technology in teaching and learning.

Kairiss was previously a member of Yale's Department of Psychology and the Interdepartmental Neuroscience program, with teaching and research interests in Computational and Cognitive Neuroscience and the biophysical basis of memory. He was awarded the Yale College-Lex Hixon Prize for Teaching Excellence in recognition of exemplary teaching at both the undergraduate and graduate levels.

His knowledge of brain and cognitive science enables him to apply the latest insights into how young adults learn.

> — EDWARD KAIRISS, PH. D., Director of Faculty Development and Innovation

'Faculty Without Borders.' This is a program where we encourage faculty to welcome other faculty to come in and observe their class. We try to make it easy with an online form: here are the times I can welcome visitors, and here's the number of empty seats available. This notion of opening your door is catching on. Not only does it help faculty share pedagogical ideas with their peers, to explore and experiment, it also helps build a culture where teaching excellence is paramount.

demonstrate something they do in the classroom. Then the buzzer goes off. It's quite effective because you're forced to be very salient and explain something you found to be valuable in the classroom. Faculty really love it, so we're hoping to do it more.

"The 'flipped classroom' model gives faculty so many opportunities to tap into that part of themselves that says: 'I'd like to try something



"We have REDAY, Research and Engagement Day, which is an opportunity for faculty and students to celebrate and share things they've done -- a research project, an independent study, or classroom activity. And we had a teaching slam, which is based on a presentation format often used at academic conferences, where you've got a limited amount of time to go up and do a demonstration. In the last iteration of this, we had 10 faculty given ten minutes to

new.' They know that students show up not to listen to a lecture, but to solve problems, have discussions, engage in debate, or do some type of group project or task, sharing and collaborating.

"Some of the technologies we see growing in popularity include 'personal response systems.' It's basically electronic polling. A professor will talk for a period of time, then pose a question – perhaps a multiple choice question or some kind of challenge – and then give students a few minutes to respond. Their responses are collected electronically and displayed on a screen. So

if I've just been talking about Newton's Second Law of Motion and I gave them a question about it, and 70% of the class gets the wrong answer, that tells me, OK, I need to step back, and figure out why they didn't understand it. Plus, for the students, it's a challenge. Everybody has to participate. It's not just a few people raising their hands. It gets the whole group involved.

"Getting good feedback is a tremendous reward *in itself. The true measure of good teaching is* good learning. And one of the hardest questions to address in all levels of education, but certainly in higher ed, is how we do we measure learning outcomes and learning goals? So any measurement of any kind of impact can't be just about measures around teaching or observations about teaching. They must be tied to measures of student learning and student progress."

Bryant is really invested in teaching," observes Glenn Sulmasy, Provost and Chief Academic Officer. "And the new Academic Innovation Center has inspired our faculty to up their game.

"One of the first days the AIC opened, we had two teachers who, in different departments, happened to be scheduled at the same time and realized there was a natural symbiosis between *their two subjects – sociology and applied* psychology. 'Why don't we bring our two classes together for the first meeting?' They were able to do that in the Innovation Forum because it has larger capacity than classrooms. It was terrific to have these two faculty members co-teaching and laying the groundwork for their classes

with group exercises and discussions. And we just had a design thinking class where it was a psychologist and a management professor working together. These are things we want to build on to be more interdisciplinary.

"The Innovation Forum is used for so many different kinds of activities, like elevator pitch competitions, debates, Town Halls, the kinds of things that not only require a larger space and a more flexible space, but that also make the teaching more public. Suddenly you see, wow, this is what teaching at Bryant is like. It's not just being secluded in a classroom with the door closed and watching PowerPoints.

"Bryant has been on the cutting edge, too, in our requirement of the major-minor – that if you major in a College of Business area, you must minor in Arts and Sciences, and vice versa. That is increasingly appealing to employers because they're looking for more of a Renaissance person.

"And that's why ethics and leadership are interwoven into a lot of our academic programming. Just as we are reviewing undergraduate and graduate curriculum to ensure that innovation is reflected, so do we want to ensure that ethics and leadership are reflected, as well. It's all about achieving true academic excellence."





A Bryant education inspires students to discover their unique passion and create their own path to success. It is a student-centered education that provides the knowledge, skills, connections, credentials, and qualities of character that prepare students to think ambitiously about their personal and career goals, to think in a global context, and think as innovative problem-solvers.

Learning to be Innovators

Curiosity and Creativity, Collaboration, Connectivity, Integrative Thinking, Perseverance



Bryant students learn in many innovative ways: interdisciplinary studies, group projects, leadership training, internships, social entrepreneurship, mentoring, global immersion, character building, new technologies...

> Our world-class faculty integrate theoretical and applied concepts in a wide range of majors, from accounting to sociology, all complemented by rich co-curricular opportunities.

The challenge is to always be creative. As the poet Maya Angelou said, "You can't use up creativity. The more you use, the more you have."



As former Dean of the College of Business, Jack Trifts is an accomplished academic administrator and researcher. His noteworthy research has advanced the field of finance, but it's in the classroom where Trifts, Professor of Finance, is most energized.

Trifts presents his lectures online in advance of class time, a technique that yields more student-faculty engagement because he can use class time to focus on facilitating, tutoring, and coaching students – in teams, small groups, or one-on-one – through dynamic in-class exercises that challenge students to compare, and evaluate their findings.

"Education is not just about learning facts," he says. "Instead of spending our time together lecturing, I want to spend the time challenging the students to think about real issues" - including how financial markets and tools of finance affect a business enterprise.

> - JACK TRIFTS, PH. D., **Professor of Finance**



Tiffany Venmahavong '18 Major: International Business Minor: Marketing, Chinese

Tiffany Venmahavong is a member of Bryant Scholars, which is designed to engage and support students who are dedicated to excellence in scholarship. After graduation from Bryant, she plans to leverage her Bryant experience and global perspective by pursuing a post-graduate degree in international development, sustainable development and/or international business law.



Drew Phelan '17 Major: Biology Minor: Human Resource Management

For several years, in the University's Glycomics Lab, Drew Phelan has conducted research on topics ranging from microbiology to environmental science. Working on real projects such as "Borellia Burgdorferi: VisE1 as a Potential Ganglioside-Binding Protein," provides the Honors Program member with important lab experience on equipment that students at other schools don't get to utilize until graduate school. She has already copresented her research findings with Bryant faculty at three prestigious science conferences. "This gave me a huge opportunity to network with professionals from various backgrounds across the U.S."



Nick O'Hara '17 Major: Computer Information Systems Minor: Communication

With a passion for innovation and building things, as well as a love of computers, Nick O'Hara was attracted to Bryant's numerous entrepreneurship opportunities, including Bryant Ventures, where students team up with alumni mentors to launch successful ventures, The Collegiate Entrepreneurs Organization, Enactus, the annual App-A-Thon competition, and The Goss Prize in Entrepreneurship.

INTERNATIONAL ENGAGEMENT is a cornerstone of Bryant's *Vision* 2020 *plan*: Expanding the World of Opportunity. And Bryant is becoming a leader in international education.

About half of Bryant undergraduates study abroad, with many choosing the university's distinctive Sophomore International **Experience (SIE)**. Each year, several hundred students participate in SIE, a faculty-led, two-

Bryant students often say that their Bryant experience helped them achieve more than they ever thought possible. Campus life is 24/7 and 360°, purposefully integrating lessons learned in class with co-curricular opportunities that build skills and determination.

"Bryant students learn about global affairs in class and through study abroad – whether it be for a semester or travel overseas with a professor for research," explains Hong Yang, Ph.D., Vice President for International Affairs.

week experience in a foreign venue. In the semester prior to this immersive experience, students learn more about the nation's culture and commerce through historical readings and analysis, foreign language study, and art appreciation.

A BRYANT CAMPUS IN CHINA

Bryant Zhuhai is a joint venture with the Beijing Institute of Technology, and is Bryant's most ambitious international academic initiative. Bryant is the first and only American university to have a campus in Zhuhai, a city of 45 million people across the China Sea from Hong Kong. The four-vear undergraduate program is taught in English and adheres to Bryant's highest standards for curriculum and faculty.

This affirms three defining components of Bryant's international philosophy: One, global learning is essential. Two, international experience and cultural understanding are key pillars of a Bryant education. And three, China is a cornerstone of Bryant's international strategy.

On the Smithfield campus, Bryant's Confucius Institute offers Chinese language and cultural programs to students and local communities.

"All business is international because what happens in one part of the world affects what happens in another," says Madan Annavarjula, Ph.D., Dean of the College of Business. "We're giving Bryant students what they need to compete in the global economy."



Progress in pioneering, faith in the future Our campus is quite beautiful, and visitors often say that it feels like a friendly, small town. But now there's something more – an energy and buzz that reflects the excitement of innovation. There is a deeper sense of community, and a greater confidence about the future.



If you are in the education field, you know that a culture of innovation is pretty rare. Tradition often gets in the way of trying new things, and inertia is the enemy of innovation. So, sadly, higher education lags behind other sectors in innovation - science, medicine, technology, commerce, the arts... But it shouldn't be that way. Our work, after all, is to share knowledge and our mission is to dare to be different and better.

Conclusion

We encourage you to share with us your insights, your initiatives, and thoughts on innovation.

To that end, please review the bibliography of articles and books on page 30. The selections illuminate what innovation is all about: why it's imperative, how it can be achieved and assessed. Perhaps you'll get some new insights and inspiration from these sources. We certainly have.

At Bryant, we're pleased with the progress we've made on the four fronts covered in this report: initiation, facilities, teaching and learning. These initiatives are relatively recent. But, with due respect to my predecessors, I should note that innovation has been in Bryant's DNA since its founding in 1863 as a national business college. And as a university, Bryant's integrated curriculum of business and the arts and sciences is increasingly recognized as innovative.

While this page is meant to be a "conclusion," there is no final conclusion when it comes to innovation. What is *phenomenal* today may be deemed conventional next year, and ancient after that. But, thinking back on our progress, there are a few conclusions that seem timeless:



Get early buy-in. The faculty was involved in these initiatives from the beginning. Indeed, they conceived most of the ideas and led the way in implementing them. So they were invested, not just engaged. They appreciated that their leadership was not just greatly respected, but vital.



It takes courage. Our teachers have been amazing in the way they've embraced the challenge of examining and enhancing their pedagogy. When you have been lecture-oriented for decades, it's not easy to produce and post a video lecture for students to review in advance of class – and then develop materials to explore your concepts in class, with online research and team projects. And it's not easy to learn how new technology works. Yet nobody backed off. Our teachers devoted extra time in preparation and planning their courses without complaint. The reason they've "raised their game" is because they know it's worth it. Their true reward has been seeing their students work harder as well... with enthusiasm.

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Innovation is exhilarating. When you consider the six steps in "design thinking" -- observation, ideation, rapid prototyping, user feedback, iteration, and implementation -- you can imagine struggle as easily as success. But when you work with people in research, brainstorming, trial and error ("fail fast"), you are energized and hopeful. And when you figure out "the better way," it's exhilarating. That's what keeps you going. That is why innovation has a momentum that can seem unstoppable.

So we'll keep raising our game, raising our standards, and raising our hopes. That's not only how we can define the spirit of innovation, but equally, how we can define success.

Sincerely,

and K Machthey

Ronald K. Machtley Bryant University President



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"The IDEA program changed my career path completely After being an IDEA mentor my junior year, I was a Fellow In-Residence at a the biggest media conglomerate in the country. I lived and worked with design, engineering, software development, and students from top universities across the country.

"That experience helped me in my last job, as program coordinator at the Martin Trust Center for MIT Entrepreneurship, where I worked with students who were building companies that were turning entire industries on their head.

"Now, every day in my job at PillPack I have to be nimble as my job changes, plans change, and needs change as we are always working to make the product, service, and experience better for the customer. My Bryant experience prepared me for this. The design thinking process has become engrained."

> — RENEE Z. LAWLOR '15 Launch Manager, PillPack Inc. Somerville, MA

Dayo Owoyemi is one of ten Bryant alumni currently working at Google. Like most Bryant students, he was highly motivated to succeed as an undergraduate; his drive for excellence allowed him to finish his course work and graduate ahead of schedule in December of his senior year.

Currently an account strategist for Google Marketing Solutions, he manages a multi-million dollar portfolio of 200+ SMB clients per guarter and provides strategic advice to make the most of their advertising investments.

His Bryant studies in actuarial science and finance gave him the background necessary to analyze advertising trends and data, employ industry-specific insights, and leverage deep product knowledge to create custom advertising solutions.

The confidence and skills he developed on campus gave him the poise to maintain relationships with business owners, marketing directors, and C-suite executives in order to provide consistently high-quality consultative interactions. Owoyemi has placed in the top 15% of US account strategists in sales metrics every quarter: Q2 2016 / Q3 2016 / Q4 2016.

> — DAYO OWOYEMI '15 Account Strategist, Google Marketing Solutions San Francisco, CA





"Educational institutions put so much emphasis on exam performance to tell us how smart or successful we are," notes published author and multimedia specialist Logan.

"The content we learn is important, but it's the WAY we learn the content is changing.

At Bryant, Logan's courses moved away from written exams and focused on team projects, case studies, and real-world experiences. During his sophomore year, he took advantage of a Sophomore International Experience (SIE) trip to Rome and decided that his dream job was to travel the world and produce promotional videos.

"I recently accepted a position with the New England Patriots, helping them with their digital content," he says. "I'm taking pictures of the players, interviewing them, and posting content to Patriots.com.

"One of the main reasons they hired me was because they loved my entrepreneurial background and Bryant's hands-on learning curriculum, such as I.D.E.A."

> — JOHN LOGAN '15 Digital Content Associate at New England Patriots



QUICK FACTS

Founded **1863**

Undergraduate degrees offered: BA, BS, BSBA, **BSIB**, **BSIT**

Undergraduate enrollment: 3,443

100% of classes taught by faculty

100% of undergraduates complete both a major and a minor

45% of students complete double, triple, or quadruple concentrations

50% of students participate in foreign study

100% of students participate in at least one service learning project

99% of students employed or enrolled in graduate school within six months of commencement

Median starting salary reported by the Class of 2016: \$57,000

Organizations participating in Bryant's extensive recruiting program: 400+

NCAA Division I varsity sports teams: 22

Graduate degrees offered:

MBA, MPAc, MST, MACom, MSAE, **MSGES, MSPAS**

U.S. News & World Report ranks Bryant University 9th in our category

MONEY includes Bryant Among the "50 Schools That Add the Most Value"

Forbes.com notes Bryant among "300 Schools Worth the Investment"

College Factual ranks Bryant among the **top three** business programs in the United States



Sandra Enos worked in a state prison and child welfare as well as a humorist and governor's policy aide before entering academia 15 years ago. Her impressive career experience in the public and nonprofit sectors inform and inspire the service learning for which she is acclaimed.

Her research focuses on child welfare, crime and justice, teaching social change in higher education, and international service learning. A dynamic teacher, Enos is known for deepening students' understanding of the world.

Open-ended, provocative, and sometimes painful questions are par for the course when it comes to

Sociology of Innovation and Creativity, a course Enos created through her Bryant Faculty Innovation Grant.

For the Sociology of Innovation and Creativity's final assignment, students analyze their lives through the lens of sociological imagination. As Enos explains, "You don't know who you are until you understand that you are a product of your time, social class, and geography; you're also influencing these realms by being alive." A pop-up book, a three-volume flipbook, and a huge fingerprint self-portrait were among students' creative depictions for this assignment.

> - SANDRA ENOS, PH. D., Associate Professor, History and Social Sciences



An Exceptional Commitment to Success and Innovation

On the Rise

At Bryant University, we are proud of our 154-year history of preparing students for success in their lives and chosen professions.

> Bryant is reclassified as a Master's I institution by U.S. News & World Report, and is ranked among the Top 20 in its category in the Northeast

> > 2003

The U.S.-China Institute at Bryant opens, enhancing academic and business programs with Chinese academic institutions and organizations



2001



Opening of the Elizabeth and Malcolm Chace Wellness and Athletic Center

The George E. Bello `58 Center for Information and Technology, designed by Gwathmey Siegal & Associates and home to the Stepan Grand Hall, Koffler Library and Bryant's state-of-the-art C.V. Starr Financial Markets Center, opens

2002



2004

Bryant College becomes Bryant University, with a College of Business and a College of Arts & Sciences. This transformation is key to Bryant's distinctively integrated business and liberal arts curriculum: all undergraduate students complete both a major and a complementary minor

Bryant's first capital campaign, **"The Campaign** for Bryant: It's About Changing Lives," exceeds its goal and provides philanthropic resources that propel Bryant's ambitious strategy for the future

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2005



Bryant completes a total transformation of its student center and dedicates the multi-use facility for Michael E. `67 and Karen L. Fisher

2006

2007



2010



2012



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With a clear focus on the future, Bryant's sesquicentennial celebrates 150 years of success in higher education

Bryant introduces design thinking, launching the immersive Innovation and Design Experience for All component of the First-Year Gateway

MBA students in Bryant's first graduate Global Immersion Experience travel to Chile

Groundbreaking ceremonies for "Bryant Builds," the most transformative facilities initiative since Bryant's move from Providence to Smithfield 45 years prior, recognize comprehensive plans to add more than 250,000 sq. ft. at both the Smithfield campus and in Zhuhai, China



Bryant enrolls its first entering class of Chinese students at Bryant Zhuhai, located in Guangdong Province, China. The students embark on a 4-year degree program taught in English and designed to mirror Bryant's rigorous US curriculum; graduates will receive a Bryant degree

Building on the discoveries and learning taking place inside Bryant's Ideation Lab, Bello 102 opens to accelerate innovation in what and how Bryant teaches.

2015



The Bryant University Women's Summit[®], one of the premier events for women in New England, celebrates 20 years of inspiring and empowering women

Bryant's inaugural Physician Assistant class graduates, answering the nation's call for health care professionals

2017

2013



2014

Bryant opens a School of Health Sciences and launches its Master of Science in Physician Assistant Studies program, marking its strategic entry into health care education

Kicking off "Expanding the World of Opportunity: The Campaign for Bryant's Bold Future," Bryant announces initiatives that generate historic philanthropic support for student success, academic excellence, and facilities

Building on the discoveries and learning taking place inside Bryant's Ideation Lab, Bello 102 opens to accelerate innovation in what and how Bryant teaches

The University's Class of 2020 is selected from the largest and most highly qualified applicant pool in Bryant history

2016

Creating a new model for educating innovative leaders of with character who will make a difference around the world, Bryant unveils the trailblazing Academic Innovation Center, designed by ÉYP Architecture & Engineering

Rising to #9, Bryant breaks into the top 10 in the U.S. News & World Report Master's North category. Bryant has jumped 15 points since its classification as a Masters North University in 2003.

Bryant's stadium complex, home to the Bryant Bulldogs and including the world-class Bulldog Strength & Conditioning Center, is dedicated for David M. `85 and Terry Beirne

Conaty Indoor Athletic Center, adjacent to the Conaty Park baseball and softball complex dedicated for Sue and Bill `67 Conaty in 2012, opens as the largest facility of its kind in the NCAA I New England region

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