Innovatus

The Magazine of the League for Innovation in the Community College

SUPPORTING THE ACADEMIC ENTERPRISE:
ENTREPRENEURIAL NEW REVENUE STREAMS FOR YOUR COLLEGE

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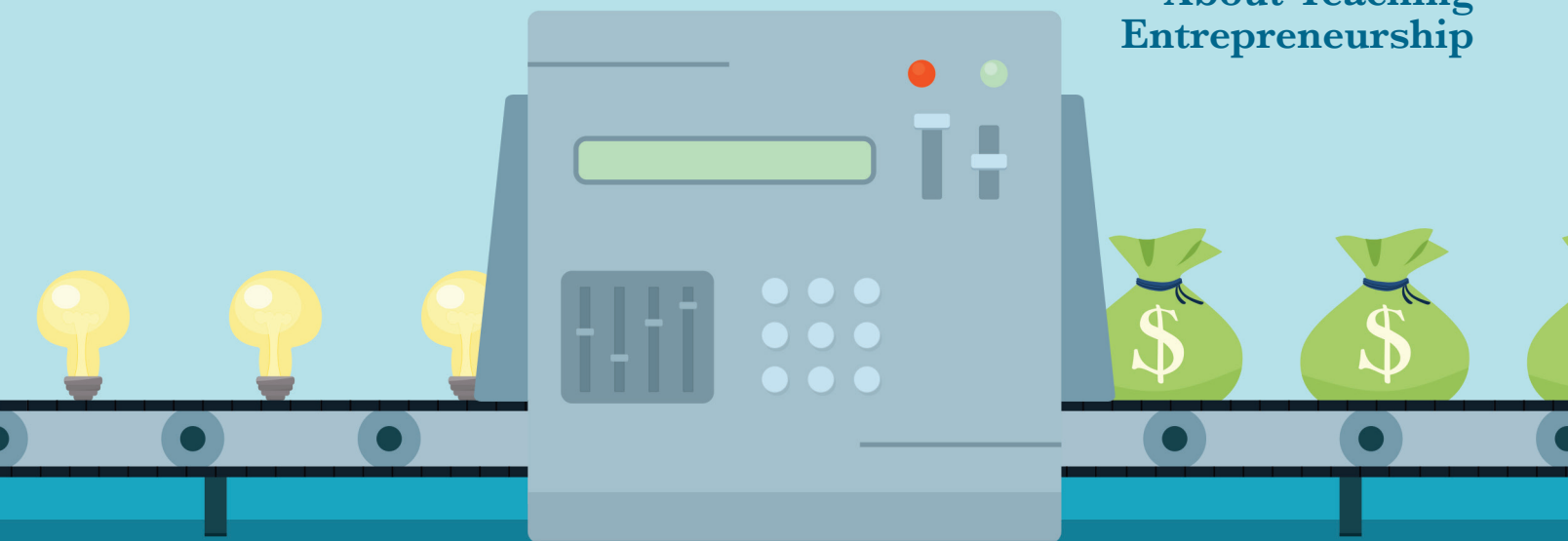### Why Community Colleges Must Be the Cornerstone

Thinking Like an Entrepreneur
FOSTERS INNOVATION

ACCELERATE INNOVATION
at Your Community College

Leading the Zeitgeist
WITH CLUB Z

THINKING DIFFERENTLY
About Teaching Entrepreneurship

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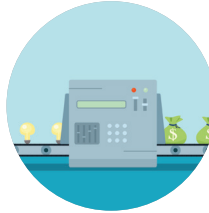**Improve enrollment, retention, and staff efficiency**

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Welcome back to *Innovatus*, the magazine of the League for Innovation in the Community College.

Community colleges have a long history of not only addressing current local, regional, state, national, and international needs, but of having courage enough to do so in ways that break the mold. Rather than continuing to offer the same programs, which may or may not be effective, we carefully think through and implement solutions that can take students into the future.

In this issue of *Innovatus*, the League highlights innovative ideas and efforts that demonstrate community colleges' essential role in progressively effecting change. In these pages, readers will

- Learn about new revenue streams for community colleges;
- Consider how thinking like an entrepreneur can foster innovation;
- Explore how to accelerate innovation at their college;
- Learn about a model to increase student success through experiential learning;
- And more …

The League for Innovation encourages you to use the information offered in this issue of *Innovatus* to further your institution's efforts to address societal and workforce needs by thinking differently across programs, departments, campuses, and institutions.

CHRISTOPHER L.G. WHITAKER

Chair, Board of Directors, League for Innovation in the Community College

*President, Humber College Institute of Technology and Advanced Learning*

SUPPORTING THE AC
Entrepreneurial New Reve

The traditional higher education business model has more in common with a medieval monastery than a modern corporation, largely dependent upon state largesse, charitable contributions, and generous payments from wealthy novices. For the past half-century, public colleges around the world have faced unprecedented budget pressure driven by declining government funding, aging demographics, steadily rising costs of technology and talent, and expanding expectations for student support.

Increasingly, campus leaders have been required to adopt an entrepreneurial mindset, seeking out new revenue streams to support the academic enterprise. In many ways, though, academic culture resists a focus on generating profit. Some of the most cherished academic ideals include collegial self-governance, a belief in education as a public good, a commitment to promoting access for disadvantaged students, and the academic freedom to pursue new learning without regard to mundane political or economic considerations. Most campus leaders know the challenge of encouraging market-focused, data-driven program decisions among the academic rank and file, who trust their own disciplinary expertise more than the fickle, changeable demands of students or the labor market. Moreover, entrepreneurship demands an acceptance of risk that is extremely uncomfortable for most public colleges, conflicting with both the zero-fault-tolerance of academic culture and government expectations of fiduciary responsibility.

> "*Increasingly, campus leaders have been required to adopt an entrepreneurial mindset, seeking out new revenue streams to support the academic enterprise.*"
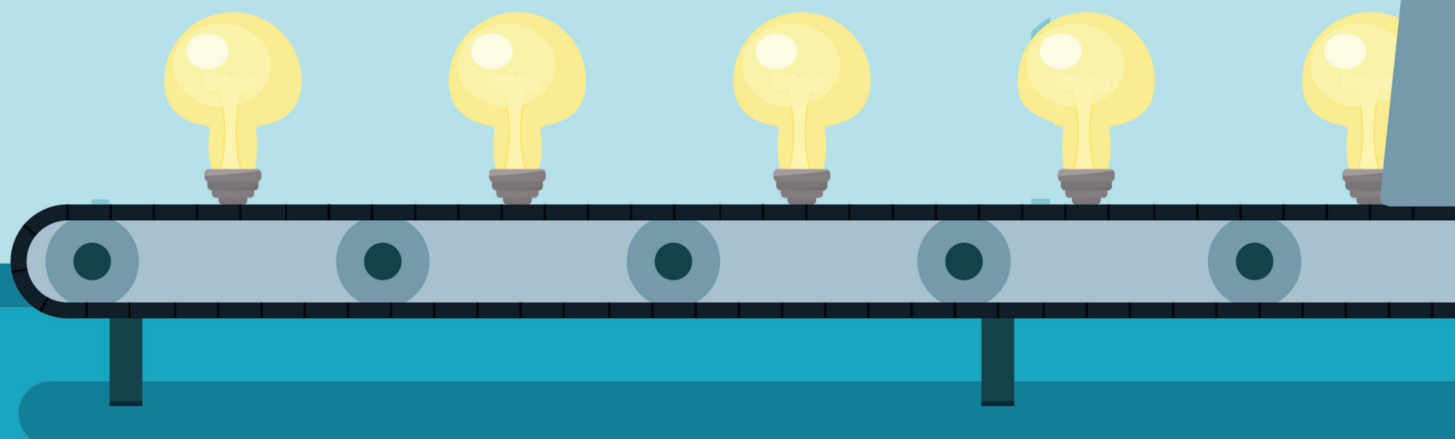
ADEMIC ENTERPRISE:
nue Streams for Your College

BY KEN STEELE

Nonetheless, necessity can be the mother of compromise: Even the ancient monastic orders farmed their lands and sold grain, liquor, ale, cheese, and honey to support their holy missions. In recent decades, colleges and universities have explored hundreds of revenue opportunities, with varying success. Some ventures were too risky, failing to generate more income than expense, while others failed through an overabundance of caution.

The most promising new revenue opportunities for your college will depend upon its history, culture, resources, context, industry partnerships, and competitors—and some unpredictable global forces. In general, though, I counsel college leaders to look for alternative revenue in four ways: monetizing the affinity of your stakeholders, leveraging the potential of your campus, commercializing your academic activities, and pursuing new markets for training and education.
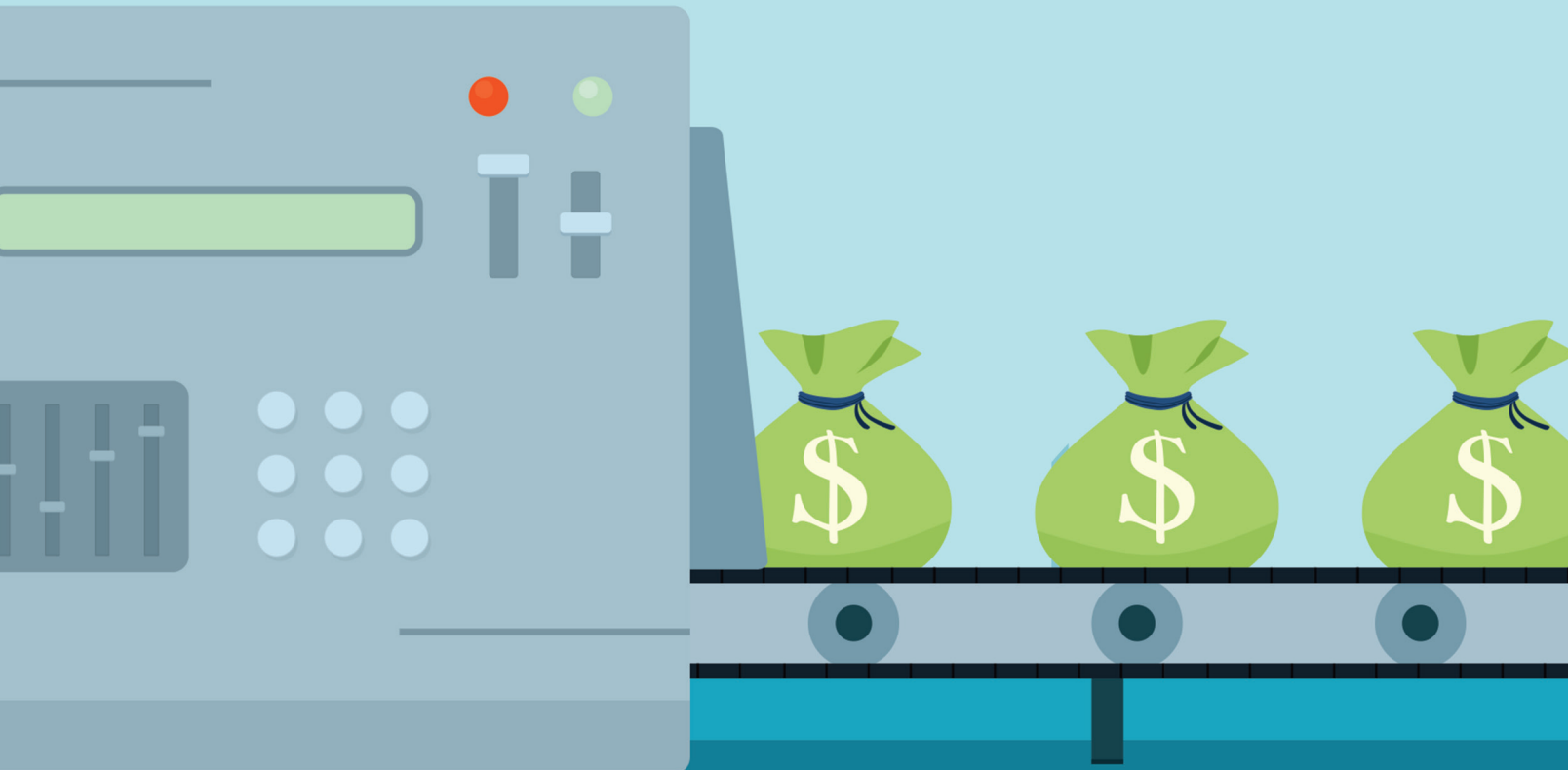
MONETIZING AFFINITY

On many campuses, fundraising is the least controversial revenue stream. American higher education raises $40 billion a year from charitable foundations, alumni, corporations, and the general public. Many community colleges have barely scratched the surface when it comes to alumni engagement, donor stewardship, major gifts, legacy giving, or naming rights. New technologies are opening opportunities for online and mobile donations, focused days of giving, and crowdfunding for everything from band uniforms to research labs.

Before exploring other revenue options, be sure your advancement operations are maximizing their potential. Obviously, for major American universities, NCAA athletics generate billions of dollars in broadcast contracts, stadium billboards, luxury boxes, and ticket revenues. But those institutions also spend massively on athletic facilities, player scholarships, and coaches' salaries. Most Division I schools lose twice as much on athletics as the champion schools profit. Ventures that don't achieve a net profit are not revenue at all. And although the NCAA example may seem distant from community colleges, this lesson is close to home for campuses making the difficult decision to cut beloved but costly athletic programs.

Loyal alumni can provide ongoing revenue to their alma mater quite literally from cradle to grave, buying infant spirit wear for the next generation and collegiate caskets or burial urns for their final resting place. Your college may already offer affinity credit cards; group insurance; alumni travel; or institutionally branded coffee, wine, or license plates. About fifty American colleges are home to campus retirement villages, a permanent homecoming bundled with tuition fees. The intensity of your school spirit and alumni engagement will determine the potential of affinity approaches.

LEVERAGING YOUR CAMPUS

College campuses are miniature cities, with a range of revenue opportunities from parking fees and fines, vending machines, food services, and other retail. Edmonton's NorQuest College anticipates $100,000 a year from operating a campus bank branch. Student dining cards or stadium concession sales can generate steady revenue. Maine's Unity College sells fresh produce and branded hot sauce from the campus farm. The challenge is to operate campus services at sufficient profit without making stakeholders feel exploited.

Many institutions operate profitable student residence halls or outsource them through partnerships with private investors. More luxurious campus dorms can double as conference centres in the summer, while on-campus hotels provide accommodation for alumni and guests, and work experience for students. If your buildings are particularly scenic, you can rent the campus as a backdrop for motion picture productions.

> *Some of the largest financial returns can come from pursuing new markets for your existing academic programs, such as students living in underserved areas, veterans, and/or those who already have bachelor's or advanced degrees."*

Campus lands are a timeless asset with revenue potential. In the right market, you can sign long-term land leases for office, residential, or retail development. You can share revenue from a professional sports stadium, or even build an entire town around your campus, like Simon Fraser University's UniverCity, expected to generate a $150 million endowment. In the pursuit of energy efficiency and sustainability, some campuses have drilled natural gas wells on campus or built wind turbines or solar farms, sometimes selling surplus energy back to the regional grid.

Realizing campus revenue potential requires entrepreneurial thinking and sound management in ancillaries, but won't disrupt the academic status quo.

COMMERCIALIZING ACADEMIC ACTIVITY

Research universities have been transferring technology to the private sector for a century, but even if your institution isn't poised to license medical breakthroughs or launch the next Silicon Valley, you may profit from applied research, or offering lab services or human resources consulting to corporate clients. Hundreds of campus-based entrepreneurial incubators help launch new ventures, often in exchange for rent, equity, royalties, or future philanthropy.

Your college can realize revenue not just from research activity, but also from teaching and learning activity. Some colleges sell or raffle houses built by their construction trades students as a learning exercise. There is seldom much profit in operating a campus restaurant, but Niagara College has established learning enterprises, including a culinary institute, commercial greenhouses, aesthetics spa, teaching brewery, winery, and distillery, that collectively contribute as much as $1 million annually.

Commercializing research or learning activities will require faculty champions and long-term commitment, but won't meet as much cultural resistance as pursuing new markets.

PURSUING NEW MARKETS

Some of the largest financial returns can come from pursuing new markets for your existing academic programs, such as students living in underserved areas, veterans, and/or those who already have bachelor's or advanced degrees. Building on the needs of part-time students might require fundamental changes to program delivery and timetables, such as extended hours, monthly session starts, compressed delivery, or online learning. For example, a burgeoning $2 billion online program management industry offers a range of revenue-sharing models.

In many countries, international students are the revenue mother lode. Colleges hire foreign agents, establish pathway programs with multinational partners, license their programs to foreign institutions, and even establish overseas campuses. International ventures are risky, though, facing global competition and volatile market conditions, from currency fluctuations and natural disasters to military conflict or political fallout.

Some community colleges generate millions in revenue—at very strong profit margins—through continuing education, apprenticeship programs, customized workforce training, or custom credentials for sector councils and industry associations. You might even find potential in employee tuition plans, like the partnerships Moraine Valley Community College has with UPS and Valencia College and other education partners have with Disney Aspire.

Like any entrepreneur, a campus CEO seeking revenue has to weigh institutional strengths, market demands, and competition. The most transformational opportunities often require a significant culture shift across your institution, increased tolerance for market-driven thinking, and respect for the entrepreneurial mindset.

Ken Steele is President, Eduvation Inc.

WHY COMMUNITY COLLEGES MUST BE THE CORNERSTONE

BY AMBER SMITH

The United States is at the front end of the greatest talent shortage in its history. The combination of unprecedented global competition, historic low unemployment rates, unacceptable high school dropout rates, and the departure of 80 million baby boomers from the workforce requires better talent supply chain models.

Attracting, growing, and retaining talent has become a battle cry across industry, with many companies and communities scrambling to develop solutions. Specifically, aerospace, manufacturing, construction, IT/cyber, and health care are all concerned about their future talent needs; the problem is exacerbated by the fact that they are all facing the same challenge. Many groups are trying to create their own one-off industry-focused programs to reach students and families

earlier in their career exploration and education selection process.

The primary problem is not the tight labor market, innovation moving faster than our ability to train talent, or the lack of workforce development and training resources. The challenge is that we have so many siloed, overlapping efforts that are not strategically aligned at the local, state, and national levels. Students and job seekers are confused and cannot find the information they need when they need it to make informed career and training decisions.

Approximately 75 percent of U.S. high school students believe they must earn a four-year degree to secure a rewarding career. In reality, about 20 percent of future careers

will require a traditional college degree, according to the National Skills Coalition. Of the top 50 high-demand careers, only six (12 percent) require a four-year degree. These data show that industry must work more closely with community college partners to strategically position them to provide the cornerstone for workforce and economic development models going forward.

Together, we must drive greater career awareness of all industries among students, even those as early as middle school, so they can identify career pathways that match their interests. We must give them, and their families, the hope and support they need to complete high school and make informed training and education decisions to secure rewarding careers.

The Tucson, Arizona, community is coming together to launch its first comprehensive centralized workforce development and talent optimization solution. This holistic end-to-end model connects and integrates existing workforce development ecosystem resources to provide a trusted and unbiased universal hub to support students, job seekers, and employers across all industries.

In spring 2019, for example, the Tucson Metro Chamber brought the right people, processes, and technology together around a unified goal to create a better model to feed military-trained talent into high-demand aerospace jobs. As part of this holistic ecosystem model, the Chamber hosted a week-long Aerospace & Defense Workforce Innovation Summit with corporate partners (e.g., Raytheon, Cisco), higher education leaders, and community college training partners. The Summit concluded with a two-day demonstration that used the skills-

matching technology of PipelineAZ to pre-match local talent, including transitioning military members and veterans, with high-demand positions in aerospace and defense, resulting in 166 interviews in 11 hours and a 68 percent rate of hire. The Chamber, Futures, Inc., Pima Community College, and other

> 66 *Together, we must drive greater career awareness of all industries among students, even those as early as middle school, so they can identify career pathways that match their interests."*

▶ *Amber Smith addresses workforce issues at the 2018 Aerospace & Defense Workforce Innovation Summit.*

partners are now scaling this model to create the first Arizona aerospace and defense talent pipeline solution built around the community college to provide the cornerstone for training and credentialing needs going forward. This model will quickly grow to include other high-demand industries.

This public-private partnership approach strategically links all levels of talent to existing career opportunities, while also providing a career development pipeline directly to education and training partners. Leveraging proven technology, every employer, student, and job seeker can access the resources they need—establishing Tucson, and the state, as a national showcase of workforce innovation and helping to address complex workforce development challenges of today and the future.

Amber Smith is President and CEO, Tucson Metro Chamber.

THINKING LIKE AN ENTREPRENEUR
FOSTERS INNOVATION

BY JOHN J. "SKI" SYGIELSKI

Through my daily interactions with students and employees at HACC, Central Pennsylvania's Community College, and with members of the community, I learn their needs, hopes, and aspirations and hear how our institution can help them fulfill their dreams.

By listening to these voices over the past eight years, during my tenure as HACC President, we have transformed the college's Workforce Development and Continuing Education Division from a money-losing operation to a robust, thriving engine of change throughout Central Pennsylvania and beyond. This division is at the forefront of forging business and industry partnerships to fill the growing skills gap created by an aging, retiring workforce and no dedicated pipeline of ready-to-work individuals. Manufacturers in Pennsylvania and across the country are grappling with the prospect of approximately 2.4 million unfilled jobs over the next decade (Manufacturing Institute, 2018).

Our industries need solutions today. They need us to listen and innovate to meet their needs. Among HACC's innovative partnerships are apprenticeship programs that provide tools to upskill the workforce. Apprenticeships transfer the skills of an aging workforce to new employees, who work full time and take night classes at HACC. The competencies they gain at the worksite, coupled with the technical training they receive through HACC, allow them to earn as they learn during the 18-month program.

HACC is the first community college in Pennsylvania to provide an apprenticeship program (Commonwealth of Pennsylvania, 2017). The Industrial Manufacturing Technician Apprenticeship Program was developed in partnership with AMES Reese and the Pennsylvania Department of Labor and Industry. New cohorts for fall 2019 included an emphasis on high schools and a pre-apprenticeship program for high school students in Lancaster County.

> *We set our students up for career success while providing economic solutions that are practical, effective, and easily deployed."*

In March 2018, HACC launched Pennsylvania's first Hospitality Apprenticeship Program in partnership with High Hotels to provide low-skilled staff a pathway from entry-level jobs to management. The college implemented an apprenticeship in tool and die starting in January 2019 with support and funding from TE Connectivity. This partnership supports a four-year apprenticeship program to train current employees as tool and die makers with plans to expand to include other industries in the future.

When HACC learned of the need for a skilled workforce to sustain the growing craft beer industry in Pennsylvania, we worked with Brewers of Pennsylvania (BOP) to create a pathway into the craft-brewing field. BOP helped HACC develop a curriculum for the college's Brewing Science Certificate Program, which focuses on building the necessary talents for the industry. Local breweries partner with HACC to utilize their space and equipment. Students build a beer from recipe to creation as the capstone of the program.

HACC also responded to the needs of the emerging medical cannabis industry by partnering with the Pennsylvania Medical Cannabis Society to offer one-day information sessions to educate those interested in the field. HACC launched its first Medical Cannabis Business Specialist Certificate Program in fall 2019.

HACC also partners with secondary schools to identify graduates who choose to delay their postsecondary educational journey. The High School S.T.E.P. (Set goals, Take action, Expect success, and Put in the work) Academy lets students explore careers through industry tours and mock interviews before committing to a postsecondary program, while allowing our industries to stay productive and competitive.

A flexible, high-quality, and affordable education does not always have to result in a degree. By listening to the needs of the workforce and entering into intentional partnerships with businesses, we set our students up for career success while providing economic solutions that are practical, effective, and easily deployed.

Visit www.league.org/node/22050 for the reference list.

John J. "Ski" Sygielski is President, HACC, Central Pennsylvania's Community College.

Accelerate Innovation at Your Community College

BY DOUG HALL

NEED: The need for innovation at community colleges is clear. Innovation ensures the long-term success of our institutions. It enables more effective courses, greater community impact, and more sustainable economics.

PROBLEM: The challenge is how to get started with creating a culture of innovation at your community college. There is no one-size-fits-all method for igniting innovation.

SOLUTIONS: Here are some methods that have been found to help leaders ignite a culture of innovation at their community college.

1 **Data-Driven Change.** Gathering high-quality data on the state of innovation across your institution can be a powerful starting point for igniting an innovation culture. It begins with facilitating a validated assessment of the perceptions, attitudes, habits, and innovation practices of faculty, staff, and leadership across the college. Results are then compared with world-class innovation cultures to identify strengths that can be built on and weaknesses that offer opportunities for improvement.

2 **Ignite Your Early Adopters.** All community colleges have faculty and staff who innovate. A successful method for accelerating an innovation culture is to amplify the impact of early adopters of innovation by providing them with training and tools that feed their love of innovation. The goal is to activate fresh ideas and accelerate their implementation. With increased success, the new mindset, training, and tools diffuse across the organization as others are inspired and educated by early adopters.

3 **Win Big.** For some college cultures, the best way to accelerate adoption is to achieve a big innovation win. Big success with innovation ignites momentum. The win can be on a new or existing challenge your community college faces. It can be ideas for improving a bureaucratic work system or creating a new education offering or revenue-generating program. With success, the culture often moves from "we can't" to "we can." Key to success with this approach is to concentrate energy—creating a big WOW—very fast and making it happen even faster.

4 **Leverage Your Education Culture.** An inherent strength of community colleges is the culture of learning that often exists. As a result, the best method for many colleges is an investment in educating faculty, staff, and leadership in the science of data-driven innovation. This education may occur through a variety of delivery methods ranging from books, audio books, and workshops to fully online or in-person college courses.

In all cases, the goal is to help educate stakeholders in the community college on how to transform innovation from a random event to a reliable step-by-step system. When faculty, staff, and leadership believe they can innovate with increased speed and decreased risk, a chain reaction of positives occurs across the culture.
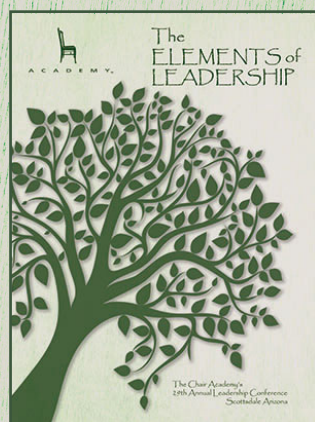
I GET IT. WE NEED TO INNOVATE. HOW DO WE START?

The League for Innovation in the Community College has partnered with Eureka! Ranch's Innovation Engineering Institute to provide assessments, education, and tools for community colleges to spearhead innovation for 50 to 90 percent less than commercial rates:

- You can conduct an assessment of your innovation culture at no cost.
- You can train your early adopters and provide them with advanced tools either online or with a compressed three-day course on site.
- You can take on a major challenge, like the League for Innovation is doing with solutions for addressing hunger relief and healthy eating for students and their families.
- Undergraduate and graduate courses are available for your community college—online or in person. In addition, when you are ready you can develop the capability to deliver the course to your entire team and to your students.

To learn more, contact Cynthia Wilson (wilson@league.org) at the League for Innovation or Maggie Pfeifer (mpfeifer@eurekaranch.com) at the Innovation Engineering Institute.

Doug Hall is Founder and CEO, Eureka! Ranch.

LEADING THE ZEITGEIST
WITH CLUB Z

BY CARON SADA

The word Zeitgeist represents the spirit of the times and the prevailing ideas and beliefs as society moves forward. As we look to the new decade and beyond, how can we lead the Zeitgeist on our campuses and better serve our students, colleagues, and communities? Club Zeitgeist, or Club Z, is designed to help bring about positive organizational change while delivering student success through experiential learning for students, employees, and community members.

Available to any college campus, Club Z includes regularly scheduled gatherings for Z Social Incubation and turnkey initiatives such as the Z Achievement Award. Implementation of the Club Z pilot at Paradise Valley Community College (PVCC) in Phoenix, Arizona, has gained national attention for student engagement, with more than 300 students earning the Club Z Achievement Award.

The Z Achievement process includes students creating and implementing a project individually or as part of a team, followed by the completion of ten reflective questions about their experience. Students can engage in any type of project of interest to them, such as service learning, civic engagement, the arts, research, and social entrepreneurship. At PVCC, students who complete the process receive an award certificate and are eligible for additional prizes funded through the Z Connect Program and Scholarship Fund.

In addition to Club Z gatherings and Z Achievement Awards, examples of initiatives include Z Imagine Pitch (an interdisciplinary pitch contest), Share Z Love (a recruitment and exhibit event), Z-Imaginary Makerspace (a recruitment and social incubation event), and Social by Design (an approach to leading change initiatives for college administrators). These activities are designed to give all campus stakeholders new experiences that inspire innovation and entrepreneurial spirit in action—the culture of a thriving makerspace even if we find ourselves in a board room.

▶ *PVCC students learn about the Z Achievement Award.*

How is Club Z innovative? The following design features differentiate Club Z from many other campus initiatives:

1. The startup of Club Z and its programming can be initiated from anywhere in the organization, allowing talent to come forward regardless of role or title (although leadership buy-in and influence are needed for ultimate scaling).

2. Club Z programming can be infused throughout the organization for students, employees, and community members.

3. Club Z represents an intentional culture with shared concepts such as "Shine a Light on the Work of Others" and "Everyone is Invited!"

4. Students, employees, and community members can engage in person or virtually through a variety of strategically connected experiences. This facilitates inclusion and deeper engagement over time.

5. Club Z represents both traditional causal design and effectual design which creates structure for those who desire a clear path to success while leaving outcomes open for students, employees, and community members to innovate.

6. Club Z demonstrates the Z Design Standard of integrative, integrated, sustainable, scalable programming. This helps overcome silos and creates opportunities for collaboration and leveraging resources without predefined limits.

7. The overall Z Vision is to facilitate positive organizational change while delivering student success. This bottom-line assertion holds that we can become better at what we do while taking action on our highest priorities.

8. Hospitality is built into every Club Z activity to facilitate connections among interested parties. The college hopes that participants leave gatherings feeling that they were meaningful and fun.
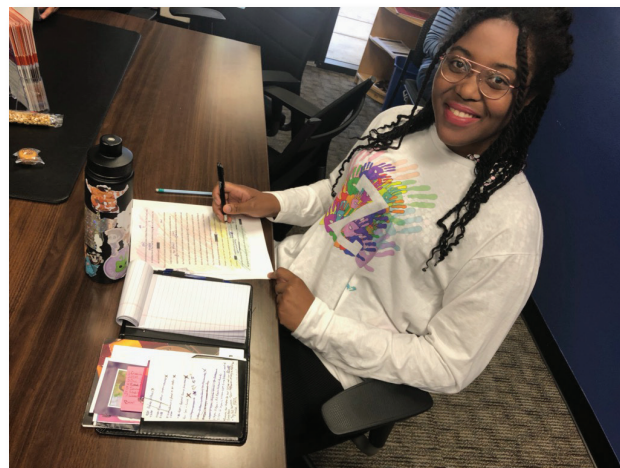
▶ *Makila Barnes prepares to pitch her idea.*

While PVCC was the first college in the Maricopa County Community College District to implement Club Z, all ten colleges and the district office now have Z-Legacy Ambassadors, or individuals who self-identify as wanting to create and implement innovation and entrepreneurship opportunities throughout the system. This group has been brought together by Dr. Shari Olson, President of South Mountain Community College, who held an open call throughout the district. Dr. Olson's approach is consistent with Z Philosophy: Anyone with an interest can engage—individuals do not have to be recruited or given permission to do this work based on their title or role within the organization.

As we move into the future, with new challenges and opportunities, everyone's talent is needed. And, to better serve our students, colleagues, and communities, it is important that everyone really is invited.

To learn more about the implementation of Club Z and Z Initiatives at Maricopa Community Colleges, or to find out how you can initiate the Z model on your campus, contact Dr. Caron Sada, creator of the initiative, at caron.sada@paradisevalley.edu.

Caron Sada is Residential Faculty, Psychology, Paradise Valley Community College.

Thinking Differently About Teaching Entrepreneurship

BY REBECCA CORBIN

Adopting an entrepreneurial mindset within our community colleges is part of a mission to better serve our students and communities. However, to spur real entrepreneurial growth, we, as educators, must ask ourselves the following questions:

1. How do we instill the principles of this practice in every student?
2. How do students learn entrepreneurially and how do we teach entrepreneurship as both an art and a science?
3. As we work within our own college's entrepreneurial ecosystem, how do we engage our colleagues to think boldly, to challenge what has historically or politically persisted, and perhaps even dive deeper into models that have previously failed but still hold potential?

Entrepreneurial leadership and teaching entrepreneurship across disciplines are essential for colleges, students, and communities to survive. Through strategic partnerships, many community college members of NACCE are advancing entrepreneurial learning through new grant-funded pilot programs in, for example, financial literacy, mentoring for young men of color, expanded STEM education for rural middle school students, and increasing intellectual property curriculum in community colleges and universities.

Collaborations with academic and corporate entities have yielded additional entrepreneurial grant-funded support for members in several areas, including:

- Development of a financial management/ entrepreneurship curriculum pilot program;
- Creation of new entrepreneurship spaces;
- Increased technical assistance, open resources, and growth in entrepreneurship leadership programs; and
- Expanded communities of practice.

Makerspaces, Fab Labs, Innovation Centers, and events like pitch competitions that encourage entrepreneurial engagement and action are additional examples of hands-on entrepreneurial learning experiences that engage both teachers and students to learn by doing.

As educators, we must emphasize the ever-pressing need for community colleges to prioritize entrepreneurship to remain relevant as well as produce the entrepreneurial graduates needed for the future. To do so, an entrepreneurial education must be offered broadly and across all disciplines. Meeting the challenges of the future and the changing nature of work requires educators to apply the principles of effectuation, as defined by Saras Sarasvathy (2001), to entrepreneurship teaching. Through effectuation, students identify next best steps to achieve their goals while balancing these goals with resources and actions. Sarasvathy has studied the behaviors and traits of entrepreneurs, and how community college leaders can use these habits to meet future challenges.

Fortunately, community colleges have proven their ability to seek opportunities and meet challenges to better serve their colleges and communities. Applying entrepreneurial principles enables educators to approach entrepreneurship pedagogy with greater purpose, shifting the culture to seek out and welcome new cultural and experiential competencies and become co-creators who lead by example, just as entrepreneurs do.

As J. Noah Brown, President and CEO of the Association of Community College Trustees, noted in *Community Colleges as Incubators of Innovation* (NACCE, 2019),

> A recurrent theme, and now an imperative, is the reality that if we are to meet the challenges of the second century of the community college movement, we must begin to think and behave very differently. We should start with what we think we know now, remember what we've forgotten, and be comfortable with what we don't know about the future. In short, to navigate successfully to meet the needs of students and communities, we must adopt an entrepreneurial mindset—letting our passion dictate our direction while exercising moral courage and risk-taking to shift the curve of decision making by rejecting the status quo.

▶ *The NACCE-Verizon Innovative Learning program provides free technology, Internet access, and next-gen technology-infused curriculum to change the way STEM instructors teach and students learn.*

Rebecca Corbin is President and CEO, National Association for Community College Entrepreneurship.

Issues That Keep Community College CEOs Awake at Night

As part of its recent strategic planning process, the League for Innovation in the Community College Board of Directors brainstormed a list of current challenges facing community colleges—challenges the League could use in its programming to help its full membership develop and share solutions. The total list included almost 70 issues and challenges from Board members and League representatives, who serve as liaisons between the Board colleges and League staff. A subset of these challenges became what the group termed "issues that keep us awake at night."

League staff analyzed the list and the nine major themes that emerged are presented here, along with a link to descriptions and other resources about the types of challenges community colleges are facing within each theme. For example, the Equity and Inclusion

theme includes challenges such as ensuring access and opportunity enrollment strategies and meeting the needs of underrepresented students. Other themes focus on issues and challenges around courageous leadership, the effects of declining resources on organizational capacity, and educating students for careers that align with business and industry needs.

This exercise was the first phase of an iterative process, so this list is not, nor it is intended to be, final, complete, or exclusive. Community colleges face numerous challenges every day, and the League is committed to increasing awareness of these challenges and helping faculty, staff, and administrators share their experiences as we all work to find innovative, effective solutions that benefit our students and communities.

The second phase of the process is being conducted this spring. The League is vetting the issues on this list with its full membership, initially through discussion sessions at the

Innovations Conference, March 1-4, 2020, in Seattle. Additional member input will be sought through a membership survey after the conference.

The nine themes are:

- Equity and Inclusion
- Funding and Revenue Generation
- Leadership Development
- Organizational Capacity
- Politics and Policy
- Safety, Security, and Civility
- Student Success and Completion
- Technology
- Workforce Development

To learn more about these issues and to join the conversation, visit www.league.org/node/22250.

> " *Community colleges face numerous challenges every day, and the League is committed to increasing awareness of these challenges . . . to find innovative, effective solutions that benefit our students and communities.*"

Do you know about the benefits available to you as a League Alliance college member?

CREATING A COMMUNITY COLLEGE CULTURE OF HEALTH

S ince 2012, the League for Innovation in the Community College has led its Community Colleges and Public Health Project with an overarching goal of involving community colleges in education for public health. Throughout the project, the League has worked closely with the Association of Schools and Programs in Public Health, initially convening a panel of experts to examine the needs, opportunities, and barriers that exist to the development of public health courses and programs in community colleges.

Following the panel's recommendations, the project's second phase focused on developing prototype curricula for community college programs that could fulfill workforce needs and provide career ladders for graduates. The models were produced in consultation with Association of State and Territorial Health Officials, National Association of County and City Health Officials, Society for Public Health Education, Association of University Programs in Health

Administration, and Association of Environmental Health Academic Programs, and were vetted by the community college and public health communities.

In the third phase, the League recognized 14 innovative community colleges for developing or enhancing courses, certificate programs, and associate degree programs in public health with Riegelman Awards, sponsored by Richard and Linda Riegelman and Jones & Bartlett Learning and presented at the Innovations Conferences from 2016 to 2019.

The fourth and current phase of the project focuses on Creating a Community College Culture of Health, with an emphasis on increasing community college student awareness of career opportunities in public health. Colleges are encouraged to make connections between public health careers and existing certificate and degree programs, such as nursing, allied health, first responder, environmental studies, engineering, and HVAC. To support public health career awareness activities, the League awarded 21 small grants for events held in April 2019 during National Public Health Week (USA) or on the World Health Organization's World Health Day. Thirty-seven additional grants were awarded to the following community colleges to support public health career awareness activities this spring.

2020 PUBLIC HEALTH GRANT RECIPIENTS

Anne Arundel Community College (MD)

Arapahoe Community College (CO)

Borough of Manhattan Community College (NY)

Brazosport College (TX)

Bristol Community College (MA)

Central Community College (NE)

Chabot College (CA)

Chandler-Gilbert Community College (AZ)

Columbia State Community College (TN)

Columbus State Community College (OH)

Doña Ana Community College (NM)

Fayetteville Technical Community College (NC)

GateWay Community College (AZ)

Hartnell College (CA)

Howard Community College (MD)

Lawson State Community College (AL)

Mesa Community College (AZ)

Mississippi Delta Community College (MS)

Montgomery Community College (NC)

Montgomery County Community College (PA)

NHTI—Concord's Community College (NH)

Pennsylvania Highlands Community College (PA)

Pensacola State College (FL)

Prince George's College (MD)

Queensborough Community College (NY)

Rio Salado College (AZ)

Robeson Community College (NC)

San Juan College (NM)

Seminole State College (FL)

Sinclair Community College (OH)

St. Louis Community College – Wildwood Campus (MO)

Stella & Charles Guttman Community College (NY)

Suffolk County Community College (NY)

University of Arkansas – Pulaski Tech (AR)

University of the District of Columbia Community College (DC)

Wake Technical Community College (NC)

Wichita State University Tech (KS)

For more information about the League's Community Colleges and Public Health Project and Creating a Community College Culture of Health, including resources, please visit www.league.org/ccph.

I n 2000, the League published *Learning Outcomes for the 21st Century*, a report of a study designed to help community colleges define and clarify the knowledge, skills, and abilities students would need for success in the new millennium. Juxtaposing findings from that study against descriptions compiled from more recent publications about 21st century skills offers a view of how defining and clarifying these skills has changed, or not, in the last twenty years.

21ST CENTURY SKILLS:

— 2000* —

Communication
- Reading
- Writing
- Speaking
- Listening

Computation
- Understanding and applying mathematical concepts and reasoning
- Analyzing and using numerical data

Community
- Citizenship
- Diversity/pluralism
- Local, community, global, environmental awareness

Critical Thinking and Problem Solving
- Analysis
- Synthesis
- Evaluation
- Decision making
- Creative thinking

Information Management
- Collecting, analyzing, and organizing information from a variety of sources

Interpersonal
- Teamwork
- Relationship management
- Conflict resolution
- Workplace skills

Personal
- Ability to understand and manage self
- Management of change
- Learning to learn
- Personal responsibility
- Aesthetic responsiveness
- Wellness

Technology
- Computer literacy
- Internet skills
- Retrieving and managing information via technology

*Source included at www.league.org/node/22050.

TWO DECADES LATER

Both lists include certain skills deemed necessary for success in a work environment, variously called workplace, soft, interpersonal, or power skills. These include such skills as the ability to communicate effectively or to collaborate with colleagues, and are distinct from the specialized knowledge, skills, and abilities required for a particular job.

— 2020** —

Communication[1,2,3,4,6,8,9]
- Effective communication
- Foreign language proficiency
- Literacy

STEM/Digital[1,2,3,4,5,6,7,8]
- Adaptable to rapidly changing/disruptive technologies
- Basic technology/software proficiency
- Core STEM literacy
- Digital/information/media literacy

Critical Thinking and Problem Solving[1,2,3,4,5,6,8,9]
- Creativity/innovation
- Critical/analytical thinking
- Curiosity
- Decision making
- Problem solving

Global[4,6,8,9]
- Civic literacy
- Global/intercultural competence
- Social/cultural/diversity awareness

Lifelong Learning[3,4,7]
- Continual/active learning
- Maintaining/expanding skills

Collaboration/Relationships[1,2,3,4,5,6,8]
- Collaboration/teamwork
- Emotional intelligence
- Flexibility/adaptability
- Service/social skills

Management[1,3,5,6,8]
- Initiative/productivity
- Resource/project management

Leadership/Professionalism[1,2,3,4,5,6,8,9]
- Ethics/integrity
- Leadership ability

**See www.league.org/node/22050 for sources and additional information.

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1 requires a master's degree or more.

2 need a bachelor's degree or more.

7 require an associate degree, credential or certification.*

Joe Smith
2781481

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Restoring the Dignity of Work, July 2018
Construction Labor Market Analyzer, September 2019