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Inspiring Change in An Uncertain Future

Original Research
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Tennessee Higher Education
Innovation and Leadership Fellows

Volume I: 2020 Inaugural Edition

Tennessee Higher Education Innovation and Leadership Fellows

Inspiring Change in an Uncertain Future

Introduction:
Addressing Strategic Enterprise Issues in Higher Education

The Tennessee Higher Education Innovation and Leadership Fellows program endeavors to be a resource for addressing challenges enterprise leaders face in all sectors of higher education in Tennessee. This collection of original research presents the observations and insight of the 2020 Fellows Class across a wide array of issues.

Authors selected their topic based on their insights to problems or opportunities important to enterprise level leaders. The Tennessee Higher Education Innovation and Leadership Fellows defines enterprise level leaders as those executive-level people with primary responsibility for the success of the entire organization. Ideally, these are the people who balance overall institutional interests with their unit's interests. The Tennessee Higher Education Innovation and Leadership Fellows operate from the premise enterprise leaders think differently from traditional line leaders. Enterprise leaders demonstrate a comprehensive understanding of the institution, its various components, and the environment within which it operates. Experts specializing in enterprise-level research and analysis universally stress that the greatest success necessary at this level results from leaders who appreciate and can leverage *interdependent* or collective work.

The Tennessee Higher Education Innovation and Leadership Fellows attempts to focus not only on the pragmatics of executing enterprise leadership but tackling troubling problems facing enterprise leaders, often referred in the literature as *wicked problems*. One important difference between traditional leadership development programs and the Fellows program is the latter aspires to develop leaders capable of tackling wicked problems. Wicked problems are usually "big picture" problems. They cross different jurisdictional boundaries and have consequences for more than one part of the institution or its environment. They often occur in a social context that aggravates competing results and creates disagreement among stakeholders because they cross boundaries and span the work of the enterprise.

Wicked problems are inherently difficult to solve because of incomplete, contradictory, and changing requirements often difficult to recognize. The less clarity of a singular solution, the more wicked the problem. Solutions to wicked problems are neither right nor wrong. They are either better or worse. Typically, an action that helps one aspect of the problem has unintentional consequences for others. Higher education is replete with wicked problems: Problems that emerge when the institution faces constant change or unprecedented challenges either externally or internally.

The articles in this collection endeavor to identify and respond to wicked problems. Not all the topics are specifically wicked, but each addresses an area of needed progress for enterprise leaders and any effort to overcome them would improve the institution.

About the Tennessee Higher Education Innovation and Leadership Fellows

The objective of the Tennessee Higher Education Innovation and Leadership Fellows program is to provide a qualified cadre of enterprise leaders, those who hold positions of responsibility for the overall institution's performance and sustainability. The Tennessee Higher Education Innovation and Leadership Fellows desire to be capable enterprise leaders who successfully tackle the growing number of challenges or "wicked problems" facing higher education.

The Tennessee Higher Education Innovation and Leadership Fellows' foundation is a substantive body of leadership theory and evidenced-based practices expressly focused at the executive level. The theoretical foundation is constructed around five Enterprise Imperatives that are the substance of the curriculum supported by six Common Core Competencies that are the specific skills and mindsets desirable to be an exceptional leader for the University. All participants completed a ten-month program of study based on the five Enterprise Imperatives through a variety of means including six formal academy sessions, personalized executive coaching as well as personalized consulting, targeted mentorships, and focused readings and textbooks. Each participant developed an individualized development plan as a tool for focusing and prioritizing the specific work they wished to pursue to become an effective enterprise leader.

The Tennessee Higher Education Innovation and Leadership Fellows program operates on an annual cohort basis. Each year, candidates are selected to participate from across all public higher education sectors in Tennessee. Selection for participation in the program is made from nominees in concert with the nominee's senior leader of their campus or system. The program was initiated in 2019 with an Inaugural Class of 2020. More about the design and execution of the program can be found at: https://www.tn.gov/thec/innovation-and-leadership-fellows.html.

Training Faculty in the Art of Teaching: Fostering Student Success

Richard J. Bloomer, University of Memphis

Introduction

A review of the strategic plans of most Tennessee colleges and universities makes it apparent that "student success" is a high priority. Whether this recent focus is fueled by a feeling of obligation on behalf of the administration to provide the best possible experience to students or by the fact that state funding is directly linked to graduation, remains unknown. Regardless, student success is a popular term these days, not only in Tennessee but across the country. In fact, a search of this term on the Chronicle of Higher Education website provides supportive evidence, with thousands of "hits" when seeking articles related to student success. Most institutions now have entire teams working diligently in this one area, inclusive of faculty, staff, and administrators. Their goal? To enhance the learning experience of students and to allow them to fully matriculate through a program of study, graduate (ideally in just 4 years if pursuing a Bachelor's degree), and move into society as a productive citizen. Although this approach seems logical and was the norm when students went off to college just a few decades ago, successfully completing college programs of study in the specified period of time remains a challenge for most students today.

Problem Statement

So what appears to be the problem and are there new items on the table that perhaps were not present just 20-30 years ago, in particular at 4-year institutions? Related to new problems, there may be many, including more students who are employed (i.e., more work and less study), full-time financial aid status considered as 12 credit hours per term (when 15 hours are generally required to graduate in 4 years), students with children of their own and other family members to care for, and the unfortunate mindset that if it takes 6+ years to complete a 4-year degree, this is fine (i.e., no sense of urgency).

Another contributing factor might be the greater emphasis on research at many institutions. Faculty once were focused much more heavily on teaching, developing courses, spending time advising and working one-on-one with students, and simply being more engaged in the daily lives of those they were teaching. There was a strong connection, the students felt as though someone was always there for them, and they were accountable to their professors. Some of that feeling seems to be lost today, as many faculty have research obligations that occupy a good amount of their time. They are employed at universities that focus much more heavily on research productivity now than in years past and the expectations are higher. They need to secure external funding, publish a certain number of peer-reviewed manuscripts each year, and build a national research reputation. This oftentimes leads to the actual course preparation, teaching, and focus on other student-related items being placed on the back burner.

While the above may be at play in some cases and is certainly a problem at larger, research intensive universities, it is really not the main concern. The real problem lies in the fact that most PhD-trained faculty at colleges and universities across the country are quite simply not trained in how to teach (Note: the same applies to Masters-level faculty members). That is, many (or most) have little to no meaningful training in pedagogy; see example from my own College. That means they have no formal education on how to develop course objectives and learning outcomes, how to align learning outcomes with assessments, how to draft lesson plans and deliver materials effectively in a face-to-face or virtual setting, and the list goes on. I know this because I am one of these people. In the entirety of my college career and throughout my PhD training, I did not have one course in pedagogy. That's right. Over 200 credit hours of college education and 0 hours in how to teach. Yet, my first assignment as a university assistant professor included roughly 50% of my time allocated to course instruction—at both the undergraduate and graduate level.

This may be surprising to some but it is not at all unique. Most PhD-trained faculty receive little to no formal education in teaching, yet are often expected to spend 50% or more of their time doing just that. For those in the health sciences, faculty typically spend 4 years to complete their undergrad training, 5-6 years in graduate school, and another 2-5 years completing a post-doctoral fellowship before heading into their first faculty job—which almost always involves teaching. Therefore, they have completed 12-15 years of training and have spent no time actually learning how to do a large portion of the job that they have been hired to do. Once hired, many barriers exist for change and continued growth—including the incorporation of technology into traditional courses and the need to develop courses as fully online alternatives. With the latter, it's apparent that the level of preparedness varies considerably across faculty members.

Perhaps I am making it sound much worse than it actually is. After all, people who spend so much time studying and training in a certain area are at least highly knowledgeable in that area—and that *does* go a long way. In fact, when adding to this knowledge a real commitment to students, a great deal of organization, a friendly personality, and the ability/willingness to respond to student emails (a topic for a separate white paper!), such people can actually do quite well as a college teacher. Students learn, they enjoy the course, and they move on. However, two concerns remain. First, if faculty *did* have the appropriate training, students could likely do significantly *better* in their courses. Second, in addition to the lack of pedagogical training, some faculty simply *do not* have great organization, passion for working with students, or the type of approachable personality that is so crucially important to foster student success. The result for students taking courses with these individuals is often frustration and failure. This happens in every college and at every university. It might only be a handful of faculty in each area but this is the reality and it is indeed a "wicked" problem in higher education—although it receives minimal attention at most institutions.

It does not make sense when you really think about it. We expect faculty to excel in the classroom and are frustrated when they do not, yet we typically provide them with no formal

training to actually get the job done the way we would like for it to be done. Hiring untrained teachers to provide instruction at the elementary and high school level would be met with outcry from parents and other tax-paying citizens. Yet, this is acceptable in higher education? Make no mistake about it: If we truly desire student success, we better make sure that we focus heavily on equipping our faculty. As discussed in the book, Taking College Teaching Seriously—Pedagogy Matters!, pedagogy is estimated to account for 33% of student success.

Potential Solutions

So what can be done about this wicked problem? The answer is, plenty, and this section will present some ideas that can be implemented without a significant economic investment, or cost in terms of time on the part of the faculty member.

Perceived Value of Teaching

If we truly want faculty to be great classroom (or online) teachers, it is imperative that we develop a culture in which teaching is highly valued. As stated earlier, many universities have progressed their research agenda and this is sometimes done at the expense of teaching. Tenure and Promotion is usually granted based on research productivity and not on teaching. External reviewers thoroughly evaluate a candidate's scholarship but pay little to no attention to their teaching preparedness or quality. If such a culture exists of "lip service only" regarding the quality and delivery of teaching, it's no wonder that faculty may pay little attention to this aspect of their work. This needs to change.

Faculty need to understand that the chair, dean, provost, and president all highly value teaching and expect excellence with regards to all aspects of this work. Yes, research is important, as is service. But we must stress the absolute importance of quality instruction for our students, as they certainly deserve this. The culture of teaching excellence needs to be modeled in all schools and colleges. Administrators can develop an annual evaluation rubric that places a great deal of emphasis on teaching. Those same administrators can periodically teach courses themselves, in order to lead by example, and participate in pedagogical training to improve their own teaching skillset, too. Research grants specific to teaching can be offered, in addition to awards for teaching excellence. For example, in the College of Health Sciences at the University of Memphis, we have the MVP (Most Valuable Professor/Professional) award, which is granted each year to one faculty or staff member who goes above and beyond in all aspects of their work—often specific to teaching. This public recognition at our annual College meeting comes with a plaque, as well as a monetary prize, and is a prestigious honor within the College. All of these ideas can work towards developing a culture in which faculty realize that quality teaching is valued.

Faculty Training

In working to build an appropriate culture around teaching quality, it is important for development programs to be put into place to aid faculty in all aspects of their teaching. Most administrators, including chairs and deans, are not trained in how to do this, nor do they have the time necessary to devote to this rather involved task. The best approach would be to hire

or appoint someone with the relevant background training and expertise to develop and continuously train faculty. This person would serve in a similar capacity as a coach; observing faculty in the classroom (or online environment), making needed course adjustments, reviewing course materials/lesson plans/objectives/assessments and offering suggestions for improvements, etc. This person would also offer ongoing workshops on the latest pedagogical techniques (both face-to-face and online), create training modules that faculty could review and work through at their own pace, incorporate innovative teaching strategies into courses, and work to improve student success through the redesign of so called "barrier" courses. Below is a brief summary of some things we have done in our College that might be considered for implementation.

Director of Academic Innovation and Student Success
As alluded to earlier, if you do not have the *right person* in place to focus 100% of their effort on faculty training in pedagogy, it is unlikely that you will have success. Many institutions have Instructional Designers (IDs), some of whom actually have experience teaching in higher ed and some who do not. This is helpful but having a handful of IDs to serve several hundred faculty members on a campus will only get you so far. Having a dedicated ID to work with faculty within an individual school or college is much preferred. In our College, we simply identified a faculty member who had the needed expertise (e.g., 20+ years of teaching and a doctorate in Instructional Design and Technology) and modified her position assignment. She now spends nearly 100% of her time dedicated to training our faculty and improving all aspects of course design and program delivery—with the end goal of improving student outcomes. For us, this has paid dividends and is highly recommended.

Online Teaching Program for New Faculty
We do not expect graduate programs to change in order to embed pedagogy into the curriculum. We also know that the half-day "teacher training" workshops offered at many universities as part of a new faculty orientation is not very helpful. What we have done is develop an online module-based faculty training program. Click here for a brief summary and example. Newly hired faculty (in addition to graduate teaching assistants) are instructed to complete the training modules by the end of their first semester of work. In addition, existing faculty members who have a history of average or below average teaching performance are required to complete this program. The entire training program takes most individuals 15-20 hours to complete and involves everything from how to develop a syllabus to how to match learning objectives to course assessments. It has proven very helpful for new and current faculty members alike and serves the purpose of developing foundational pedagogical knowledge for faculty in the College.

Faculty Development Workshops and Seminars
While faculty development is of great importance and may involve multiple facets of a person's professional life, development specific to "teaching/instruction" often takes a back seat to that of research. As part of our ongoing commitment to faculty training and student learning, we have developed a series of workshops and seminars (mostly face-to-face but also online) that

typically include a 60-90 minute session, offered approximately twice per month, and open to all faculty across campus. These include both basic topics and the discussion of advanced and innovative pedagogical tools that can be used in courses. In this way, we are sharing our knowledge with a wealth of educators who can then immediately put these ideas to use in their courses. This has been tremendously helpful to our faculty and others across campus.

Faculty Coaching

A great coach is an incredible asset and while we are used to seeing coaches in sporting activities, many individuals now use coaches in other areas of their lives as well. Yet, it is extremely rare to see coaching in education. What a shame this is, as educators have a direct impact on the lives of so many students. It seems that educators should be some of the first people we think of when it comes to who might benefit from coaching, as the experience can indirectly impact so many lives. Our faculty have the opportunity to receive one-on-one coaching, which may include a review and discussion of their student evaluations for specific courses, a pop-in review of their classroom teaching and follow-up discussion, editing of the syllabus and other course materials, an explanation of how to incorporate innovative tools into the course (e.g., Adaptive Learning, Nearpod, Kahoot!, Explain Everything), and other relevant items. I cannot stress enough the importance of appropriate coaching for university faculty.

Teaching Fellowships

Aside from in-house training, our faculty have the opportunity to receive professional teaching development through the Faculty Guild. This innovative approach involves grouping faculty from across the country in similar disciplines so that they can navigate through the program together, reflect on their own teaching methods, and share best practices with each other. While this comes at an expense, if 2-3 faculty per year within a given college can be selected to go through this process, over time you will have a much better-equipped workforce. These faculty can then serve as mentors to junior faculty members who need assistance in developing themselves as educators.

Recommended Implementation

Considering the above, it is certainly possible for all higher education units to implement strategies similar to what we have done in our College. If funding is an issue, simply delay the use of the Teaching Fellowship program. All other items can be done at little to no cost, assuming you have a current faculty member who is capable of stepping into the role of leading others. The only cost associated with this would be to back-fill courses previously taught by this person, which can oftentimes be done by reassignment of existing faculty and/or hiring an adjunct to pick up select courses. If you are an administrator, I would strongly suggest that you get started on this plan of action today. If you delay, students will ultimately be the ones who pay the price, usually with reduced program satisfaction, higher course failure rates, and delayed graduation.

Conclusion

In summary, the majority of higher education faculty have little to no formal training in how to teach. Yet, these same individuals are the ones responsible for teaching the approximate 20 million college students across the United States each year. Recognition of this problem is needed at the highest level of administration and simple action steps can be taken to improve faculty training and preparedness. Doing so will significantly aid student success, by way of overall satisfaction in courses, retention, and timely graduation.

Dr. Bloomer is a Professor and Dean of the College of Health Sciences at The University of Memphis, where he also directs the Cardiorespiratory/Metabolic Laboratory and the Center for Nutraceutical and Dietary Supplement Research. He maintains an active research agenda, having received external funding as principal investigator for close to 50 research projects since 2005 and having published close to 200 peer-reviewed manuscripts and book chapters. He has specific expertise in the area of oxidative stress and antioxidant therapy, as well as in the use of dietary ingredients and nutraceuticals for purposes of improving cardio-metabolic health. He has served as a consultant to a variety of nutraceutical and dietary supplement companies and has been an invited guest on radio programs nationwide to discuss his research. As an administrator, he has grown research productivity considerably, through expanding/creating laboratories and hiring researchers within a focused area of investigation. Under his leadership, the College of Health Sciences was created and currently is home to approximately 1700 undergraduate and graduate students.

Face-to-Face versus Online Instruction: The Traditional University's Wicked Problem of Determining and Implementing an Appropriate Mix of Delivery Modalities

Lori Mann Bruce, Tennessee Technological University

According to Pew surveys, the percentage of teenagers who say they are online "almost constantly" doubled from twenty-four percent in 2015 to forty-five percent in 2018. And eighty-nine percent of teens surveyed in 2018 said they were either online "almost constantly" or "several times a day" [1]. With teens having such a focus on consumption of online information and projection of an online presence, it is natural for them to assume that their university will provide them with online options. Meanwhile, a very different sector of students, nontraditional students or adult learners, who are often balancing a job, families, and school, also expect online options. This sector of the market is becoming more and more important to universities; estimates are that forty percent of the current undergraduate population at colleges and universities in the United States is nontraditional [2]. Many large universities have responded to the increasing demand. In 2018, thirty-two percent of students in public institutions participated in online education in some capacity, with twenty percent of students enrolling in at least one online course and eleven percent enrolling exclusively in online courses [3]. Research from these large institutions has shown that online learning, when implemented well, can be very academically enriching for students and promotes deep, lifelong learning.

Is a movement to more online programs and online course offerings appropriate for, or even possible at, all universities? How can a small-to-midsize university with limited resources and a traditional student body determine and implement an appropriate mix of face-to-face and online instruction? Many influencing factors must be taken into account. These include but are not limited to

- student demand and needs (current and future);
- faculty ability and willingness to teach online;
- information technology systems (ITS) infrastructure;
- budget models (department, college, and university);
- funding and revenue models;
- facilities infrastructure; and
- governance, regulatory, and accreditation compliance.

These influencing factors are often incomplete, contradictory, quickly changing, difficult to measure, and even more difficult to control. In addition, because of complex interdependencies of these factors, the effort to solve one aspect of this problem can reveal or create other problems. As a result, what at first seems like a straightforward goal to offer more online options to students is actually a "wicked problem" [4].

Students' demands and needs should be at the center of any decision relative to academic program and course offerings. In terms of demands, we must be able to effectively

measure and understand the enrollment desires of our current students, as well as future students, and this includes both future students in our current markets and future students in potentially untapped markets. And we need to understand the enrollment demands as a function of level (i.e. bachelor, master, doctoral) and discipline (i.e. engineering, nursing, business, etc). Needs of online students must also be considered, since support services of online students can be different than face-to-face, on-campus students. For example, online students frequently require a different approach for admissions support; financial aid advising; academic advising; academic support services; technical support; library services; personal support services; placement for internships and clinical experiences; and career services. When a university is determining the appropriate mix of face-to-face and online courses and program, it must be prepared to provide these types of services for online students in order to meet their needs. And this can require extensive financial resources.

One of the most challenging factors to consider and deal with is that of faculty ability and willingness to teach online. This can be very difficult to measure and even more challenging to influence. Without faculty buy-in to online instruction, it will be extremely difficult for a university to increase the number of online courses and programs being offered. Incentivizing online instruction by faculty is crucial. Such incentives could include release time, financial support for scholarly activities, and/or stipends for redesign and redevelopment of existing face-to-face courses. Additionally, universities must be able to provide and incentivize faculty to participate in professional development for online instruction. An important factor in this endeavor is the university's academic leadership's ability to collaborate with and empower instructional designers, technology experts, and assessment experts to engage with department chairs to develop ways to conduct workshops and one-on-one sessions with faculty. Another incentivizing activity is public recognition and honors/awards for faculty who are actively engaged in online education. These incentives are critical to influencing faculty members' ability, as well as their willingness, to teach online effectively.

Another critical factor that affects the potential success of online courses and programs is the university's ITS infrastructure. This includes infrastructure related to high-speed connectivity, data privacy and security systems, course management software systems, adequate hardware peripherals, and timely tech support for both faculty and students. It can be challenging to determine if these resources are adequate until online programs and courses have been launched. And the hardware and software infrastructure needs are ever changing. The financial resources needed to provide this infrastructure can easily be underestimated.

An important factor that affects introductory and long-term success of mixtures of delivery modalities is the budget model employed at the academic department, college, and university levels. There are six predominant budget models for four-year colleges and universities (incremental, zero-based, performance-based, activity-based, and responsibility center management budget models) [5]. The most common model at four-year colleges and universities is the incremental budget model, where allocations are based upon the funding levels of the previous year. This makes it very challenging to invest in transitions to a wider

variety of face-to-face and online instruction. With incremental budgeting, it is typical for only new revenues to be allocated strategically and budget cuts to be evenly distributed across the university. As a result, one of the only ways for investments to be made in online education is to generate new, additional revenues, typically via online fees.

Likewise, funding and revenue models are critical. If the university is in a state that employs performance-based funding, then the parameters of the funding formula must be considered. For example, if the funding formula places a higher value on nontraditional students, then a movement toward more online programs can lead to an increase in state funding. Oftentimes, online students are not charged out-of-state tuition and instead are levied online delivery fees. Depending on the state and governing board requirements, this may or may not be allowable for the university. Additionally, the university's budget may be dependent on a variety of student fees, such as fees for athletics, parking, student affairs, etc. These fees may be used to finance the university's fixed costs and pay off debts, such as debts associated with football stadiums, student recreational centers, parking garages, etc. Can a university require online students to pay such fees? If not, then changing the mixture of face-to-face and online students can have unintended consequences on the university's ability to pay for its fixed costs and debts.

In a similar vein, the university must also consider its facilities infrastructure, as well as any debt that must be paid on facilities. For example, most traditional four-year colleges and universities have facilities and contractual obligations associated with on-campus residence and dining. Furthermore, these university facilities, in which they've invested in over decades, are designed for face-to-face instruction. Universities must assess how a mixture of face-to-face and online instruction could impact the utilization of and financial support of these types of infrastructures. If a university has a shortage of on-campus residence halls and/or a shortage of on-campus instructional facilities, a movement toward more online instruction could be financially advantageous. Conversely, if a university has residence halls or instructional facilities that are underutilized, a movement toward more online instruction could exacerbate a negative financial situation. These are factors that must be assessed in detail and considered when determining an appropriate mix of face-to-face and online instruction.

Lastly, universities must consider governance, regulatory, and accreditation compliance when considering online instruction options. For example, at the national level, all higher education institutions that offer classes online must demonstrate that they are authorized to operate in every state where they enroll students who receive federal financial aid. Universities must also track any requirements for professional licensing in every state where they operate. And universities must be prepared to meet all Americans with Disabilities Act (ADA) compliance requirements when delivering online courses. The addition of multimedia to course designs complicates the issues of ensuring that students with disabilities are accommodated. ADA compliance affects video, audio, PDFs, graphics, images, synchronous videos, and lecture captures. As another example, universities must verify the identity of a student who participate

in online courses, while also protecting student privacy. Universities must consider whether or not they are able to adhere to all of these types of regulatory compliance requirements when determining an appropriate mix of online and face-to-face instruction.

Many universities, both large and small, have ventured into the online enterprise by launching online professional master's degree programs, such as Master of Business Administration and Masters of Engineering Management programs. This strategy has advantages, one being that these types of programs are typically highly prescribed, so only a handful of courses need to be developed for online. They are often taught asynchronously, and after initial investments the programs can be very cost-effective. Also, these programs are usually aimed at working professionals who are often willing to pay a premium, e.g. additional fees attached to online courses, for the convenience of an online program. And these students are not typically consumers of on-campus housing or dining services, so their being online does not negatively impact that function of campus. Also, these types of targeted programs enable the university to explore ITS solutions and develop appropriate infrastructure that can be scaled up later. However, the market for these types of programs is becoming quite saturated, which is a double-edged sword. When there is a preponderance of online programs in an academic discipline, faculty can be quite motivated to develop and teach online courses to remain competitive. However, since this is a strategy used by many universities, late-comers can find it quite difficult to competitively recruit students.

Major disadvantages stem from the fact that these are fully-online programs. For a relatively limited number of online students, the university must deal with a large overhead of providing a full array of student services in an online manner, as well as the overhead associated with ensuring regulatory compliance. And it is typical for online students to not be levied traditional student fees associated with athletics, parking, etc. This becomes a significant disadvantage if the online programs are competing with face-to-face programs and the online enrollments are replacing face-to-face enrollments rather than adding to them. Finally, a disadvantage of this strategy is the online education enterprise being isolated to a small number of faculty members and students. As a result, there is no significant culture change in the university, where many faculty members see online education as an activity "others" do. And many students, particularly undergraduates, do not benefit from the deeper learning and professional development that results from high quality online education.

I propose an alternate strategy, which is a mixture of a small number of targeted online programs such as professional master's programs, strategically selected online courses, and wide-spread implementation of hybrid courses. Care should be taken to develop online programs that do not compete with existing face-to-face programs for student enrollments. The predominant disadvantages of fully-online professional master's degree programs listed above are negated by including selected online and hybrid course offerings. The significant and somewhat fixed overhead costs of online student services, ADA compliance, ITS infrastructure, regulatory compliance, and faculty professional development programs would then support a much broader enterprise. Online fees should apply to all fully online courses

but should not apply to hybrid courses. The revenues from these fees should always be invested back into the overhead costs listed above and shared in a limited capacity with the home academic department. Great care should be taken to avoid any of the online fee revenues being used for non-online activities; otherwise, units can become overly incentivized financially to offer online options which can lead to poor decision-making with regards to academic programming. Non-resident tuition should be waived (via scholarships) for students enrolled in fully online programs. This counterbalances the online fees and avoids programs pricing themselves out of the market. Both financially and from a marketing perspective, these scholarships facilitate recruitment of out-of-state students into online programs – students that likely would not otherwise enroll at the university.

When determining which courses to offer online, faculty should be the drivers of this decision-making. Goals should be set for each academic department/program to develop and offer a certain percentage of their courses online, where the percentage can vary depending on the discipline. And a variety of incentives can be utilized to facilitate this process. However, great care should be taken to not over incentivize this process, as it can set up faculty expectations of receiving those same incentives going forward. So, I advocate for incentives that focus mainly on the initial development of online courses rather than the follow-on instruction of online courses. With face-to-face programs, online courses should only be offered when there are multiple sections, so that face-to-face options remain available to the students. Thus, students are not forced to pay online fees and only do so as a result of their choice of an online course over a face-to-face course. Otherwise, if a face-to-face academic program does require a any courses be taken online, then those requirements, along with information about online fees, should be clearly communicated at the time of admission and documented in the university catalog.

Hybrid courses, also commonly referred to as blended courses because they incorporate a blend of online delivery and face-to-face interactions, are a key component of this strategy. Hybrid courses are in increasing demand by students because students are very accustomed to online interactions. And hybrid courses provide faculty members with flexibility when they face challenges in transforming their traditional face-to-face didactic courses to an online delivery. Research shows that students prefer hybrid courses when they provide multiple modalities for learning, significant interactivity, familiar technologies, and sustained engagement with the faculty member and classmates [6]. And many of the technologies used for hybrid courses are the same those used for fully online courses. Both students and faculty can familiarize themselves with the technologies and pedagogical approaches for online learning, which enables them to more fully participate in online courses and programs in the future.

In conclusion, a seemingly simple question of whether or not to teach a course face-to-face or online is actually a function of many factors, including student demand, student need, faculty ability, faculty willingness, information technology systems infrastructure, university budget

model, university funding and revenue model, facilities infrastructure, and compliance. These factors are often incomplete, contradictory, quickly changing, difficult to measure, even more difficult to control, and have complex interdependencies.

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The Wicked Funding Problems of State Universities: An Analysis and Solutions

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Introduction

On May 18, 2020, the commentary "Colleges Aren't Reopening in the Fall: Don't be misled by presidents who say otherwise," ran in the Chronicle of Higher Education, where Robert Kelchen wrote,

> *Higher education will be one of the last industries to resume business as usual, because of concerns with social distancing, contact tracing, and the intermingling of younger students and older faculty and staff members. This means that a full reopening of most colleges in the fall almost certainly won't happen.*
>
> *College leaders know all that. So why are some of them still expressing public confidence in reopening?*[1]

Kelchen speculates that universities are making these opening statements for three reasons: 1) to keep students enrolled for revenue, 2) for political posturing and 3) because they are being optimistic about academic research providing tests or a cure for COVID-19.

The discussion to open a public university in the fall 2020 for classes during the COVID-19 pandemic has at its heart the role and purpose of publicly funded[2] institutions of higher education. The ontological question is whether these institutions are a public good or a private good. If, in fact, publicly funded state universities are a true public good, then for the good of the public, universities would remain closed to in person classes and keep classes online until an antibody test and vaccine is created to minimize transmission. All of this would occur without any fear of revenue loss, political influence or need for optimism since the state would fund higher education as a matter of public financing (like paying for roads), whether classes are online or in person. Moreover, all politicians would see the same public good for all citizens regardless of party affiliation, and the natural course of science would produce an antibody test and a vaccine.

On the other hand, if universities are, in fact, a private good, then decisions to open campus and have face to face classes is a risk-reward balance between revenue generation and risk of

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[1] https://www.chronicle.com/article/Colleges-Aren-t-Reopening-in/248803

[2] For use in the paper, the words "publicly funded," "state funded," "state universities," and "public universities" will be used interchangeably as the vast majority of publicly funded universities are funded within states.

exposure and the spread of the virus to students, faculty and staff and associated families. If the risk is worth the reward, the universities will open and mitigate the risks, and be rewarded with revenue, especially if the message of being open resonates with the customer/student/family. Additionally, political influence will be minimized as the bottom-line, not a political calculation, will determine operations. And universities will have business continuity plans depending upon the availability of an antibody test and a vaccine and pivot as events unfold. Moreover, at a private good research institution, the investment in science around a COVID-19 and future pandemics, may yield high returns and may be worth a strong allocation of capital as a strategic investment with a very high return on investment.

At present, most state funded universities are in midmotion on a spectrum from a public good towards a private good, and on a spectrum, and thus, have to balance a myriad set of constituents, often with conflicting objectives, outlooks, explanations and agendas. This is why we see across the United States some presidents proclaiming opening for fall 2020 with others acting with abundance of caution.

Purdue University's President Daniels stated on 21 April 2020,

> *Closing down our entire society, including our university, was a correct and necessary step. It has had invaluable results. But like any action so drastic, it has come at extraordinary costs, as much human as economic, and at some point, clearly before next fall, those will begin to vastly outweigh the benefits of its continuance. Interrupting and postponing the education of tomorrow's leaders for another entire semester or year, is one of many such costs*[3].

Daniels' approach underpins the philosophical approach akin to that of a university producing a private good, especially with the use of the neoliberal word "costs" twice in two sentences and a weighing the risks and rewards, as a business case for reopening Purdue. Graduates can use their private good credential of a degree and have the ability to monetize it through employment.

Conversely, Chancellor White of the California State University System, stated at a virtual board meeting on 12 May 2020,

> *We cannot change the biology of this disease.*
>
> *As a society, all we can do is mitigate it through our personal and collective preventative measures. In this regard, the university must do its part. Indeed, on May 8th, Governor Newsom emphasized that COVID-19 will be present in our communities until there is a vaccine or therapeutic, and it will be up to all of us to change our behaviors to eliminate opportunities for the disease to spread*

[3] https://www.purdue.edu/president/messages/campus-community/2020/2004-fall-message.php

> *Consequently, our planning approach will result in CSU courses primarily being delivered virtually for the fall 2020 term, with limited exceptions for in-person activities that cannot be delivered virtually, are indispensable to the university's core mission and can be conducted within rigorous standards of safety and welfare*[4].

White's approach reflects the university producing a public good. Word usage in the above paragraphs of "[a]s a society, all of us," "communities," "collective," and "safety and welfare" are all hallmarks of public good philosophy, with an acknowledgement by White that such a decision does come with an economic cost. Even when not in a pandemic, the public good produces public benefits to the society as a whole.

Of note is that White is a biologist and plans to retire in 2020, thus, potentially making the public good decision easier and with less political pressure or personal career calculus[5].

Daniels, conversely, is not an academic, but a politician, coming to the presidency after serving as the 49th Governor of Indiana which followed a private sector business career where he served as the CEO of the Hudson Institute and President of a division of the Eli Lilly and Company[6].

Both public good and private good ontologies lay on a spectrum which has been in motion for over 100 years but accelerated since the 1980s, with each institution changing position on the spectrum over time. As baby boomers age, state tax revenue has increasingly been allocated to growing entitlement costs in the form of Medicare and Medicaid paralleling the greying of the population within the United States. With increasing spending on Medicare and Medicaid the rate of growth for these programs far exceeds inflation and the ability of a state to collect tax revenue. Thus, to balance a state budget other discretionary portions of the state budget must necessary decline. Public funding for education, both K12 and higher education, is often the largest discretionary allocation of a state budget and is often a target for absorbing these increasing entitlement medical costs making state dollars a smaller ratio of the total university budget over time[7]. Moreover, higher education is seen as being able to raise its own revenue

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[4] https://www2.calstate.edu/csu-system/chancellor/the-chancellors-communications/Pages/remarks-by-dr-timothy-p-white-may-12-2020.aspx

[5] https://calmatters.org/education/higher-education/2019/10/csu-chancellor-tim-white-retiring-california-cal-state-uc/

[6] https://www.purdue.edu/president/about/biography.php

[7] https://www.kff.org/other/state-indicator/distribution-of-state-spending/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D

through tuition and fees and thus is often recipient of a larger cut than that of K12 which does not have this revenue generating ability.

Even if state elected officials desired to spend the same or more tax revenue on higher education, most budgets do not have enough discretionary spending available to cover those increases. The ability to fund state universities with 100% public funds, as a true public good, is impossible in that there is simply not enough discretionary tax revenue to fully support all of the state universities at this time.

Public and Private Goods-A Review

Public goods and private goods both benefit the consumer. A public good is provided free of direct cost and tax dollars are used for the welfare of the public. A private good or service, on the other hand, is sold to those who can afford them. A more detailed examination of the difference between a public good and private good is found in the table below. The two main criteria that differentiate between public and private goods are those of non-excludability and non-rivalrous. The most commonly used example of a public good is that of national defense. National defense is paid for by citizens through taxes to the federal government for the benefit of all citizens, no matter their ability to pay. The government stands up a military to protect all citizens of the country with the tax dollars. Non-excludable means that we are not each paying a monthly invoice for national defense, and if we fail to pay our mobile phone bill, we do not have our national defense turned off (excluded) like failure to pay a mobile phone bill. We, as citizens, are all covered by national defense no matter how much we pay to the US treasury each year making it non-excludable.

The other criteria for determining a public good versus a private good is that of its non-rivalrous nature. A non-rivalrous product is one that can be enjoyed by many consumers at one time with another person beginning to use the product not diminishing the value of the same product to the original users. Using national defense again as an example, if 100 people use national defense and are protected, adding another a person or 10 people or 100 people does not diminish the national defense for the first 100 people. If national defense was rivalrous, then each person who added national defense would cause others to be less defended over time.

Table 1: Criteria for Public Goods and Private Goods[8]

Criteria	Public Goods	Private Goods
Meaning	Provided by government for free use by the public	Provided by companies or organizations to satisfy a consumer need or want
Provider	Government or nature	Company or organization
Consumer equality	All treated equally	Preference to those who can afford it
Availability	Available to all	Reduces with each consumption
Quality	Constant over time	Varies with ability to pay
Decision	Social choice	Consumer's choice
Traded in free market	No	Yes
Opportunity cost	No[9]	Yes
Free riders	Yes	No
Rivalry	Non-Rival	Rival
Excludability	Non-excludable	Excludable
Demand curve	Horizontal	Vertical
Examples	Police service; fire brigade; national defense; public transport; roads; dams and river	Clothes; cosmetics; footwear; cars; electronics; food

Non-excludable means that each person is not directly paying for a product and services and if they fail to pay, their services will not end. Excludable is the opposite. When it comes to a student attending a state university, there are two pieces of the financial puzzle, state dollars and tuition and fee dollars. First, let's examine the tuition and fee dollars. Tuition and fees are the direct costs charged to a student attending the university to cover a portion of the total costs of attendance. Each person pays their tuition bill, and failure to pay this bill leads to a dropping of classes and inability to continue and earn a degree, then this is, by definition, excludable. Like mobile phones, if a person fails to pay, the flow of the network connection to their phone is cut off. Failure to pay a tuition bill means the flow of information from professors in a class and the ability to earn a transcript grade is cut off. Thus, the student's tuition and fees are excludable and thus, making this portion of the university's budget clearly a private good.

[8] https://theinvestorsbook.com/public-goods-vs-private-goods.html

[9] At times public goods are pitted against one another (note from Lauren).

Unlike tuition and fee revenue for the university, state dollars, from the taxpayers of the state, act in a public good-like manner in that they are collected through taxation and allocated by the government, and the state allocation to the university is for supporting the education of the citizens of the state. If a citizen of the state pays zero dollars or pays a large percent of the tax revenue to the state, the state payment does not exclude them from accessing this state benefit. Often elected officials talk about every citizen being able to access higher education in the state due to this state payment, projecting the intent of a public good and access to the university as non-excludable. Because the state portion of the university budget is not 100%, and this portion has declined over time, the university acts more as a private good producer than a public good producer despite the public rhetoric during the state's budget season.

Examining state universities from a non-rivalrous product or services point-of-view is equally interesting. Reiterating, non-rivalrous is when a product or service can be enjoyed by many people and using the product does not diminish the others using the same product at the same time. Within state universities there are limits in class sizes, availability of classes and other such items. However, more class sections can be offered if demand warrants. Additionally, a class of five students with quality professor interaction is likely a superior good than the same class with 25 students, as the professor's time is shared with more people, allocating less time to each person[10]. Thus, university classroom education is clearly rivalrous as there are diminishments with each new student in the classroom, however, there are means by which to mitigate these rivalrous characteristics by opening more class sections, professor quality, and other such efforts.

An interesting case study is that of the Massive Open Online Courses (MOOCs), an experiment into free online courses available for anyone to enroll. This openness is akin to a public good in terms of "free" making it non-excludable but not allocated from a government but from a not-for-profit organization. MOOCs often provide a flexible mechanism for people to learn new skills, advance a career or just learn something new, all delivered at an economy of scale. The built-in assumption is that the delivery is non-rivalrous in that a class of 1 or a class of 1000 has the same content of delivery[11]. However, there is no indication that from a student perspective, with multiple learning types, if the large number of people in a class diminishes interactions that reduce the quality of learning. Additionally, MOOCs, unless they are part of a degree program at a state university, offers no advancement towards a degree and the credential building that is built until our modern society as an example of advanced learning. The value is in a degree from an accredited university.

In summary, walking through the thought experiment asking if state universities meet the requirement of being a public good, being both non-excludable and non-rivalrous, it is clear that these two items are not met, thus making a university education for a student (customer)

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[10] That said, a poorly performing professor with five students or twenty-five students, may offer the same value to each, with no diminishment, equally low quality for all.

[11] https://www.mooc.org

an excludable and rivalrous private good. Though public university education is a private good, the benefits of such an education accrue both to the person (private) and to society (public).

Public and Private Benefits-A Review

Public goods and private goods are different than public benefits and private benefits even though writers often conflate the two. Looking at the label of a good, public or private, examines the purpose of the type of good. Benefits on the other hand, whether public or private, focuses on to whom the value of the outcome accrues.

Do state universities provide a public benefit or a private benefit through the education of citizens of the state? Higher education brings a host of direct benefits to the recipient including, but not limited to, higher lifetime income, lower likelihood to have loss of employment, longer life expectancy, lower consumption of alcohol and tobacco, less likely to be obese, greater engagement in preventative health care, better mental health, higher life satisfaction, less criminality, higher voter participation, volunteerism, and tolerance of others and points-of-view[12]. This long list of positive attributes indicates that there are ample private benefits associated with obtaining higher education. Are there public benefits as well?

Public benefits are those benefits accrued by society from an action or activity. When a person achieves higher education, does the public benefit directly or indirectly? Taking the list of private benefits highlighted in the paragraph above, many of these benefits also have public benefit spinoffs. For example, a more employed and physically healthier person who volunteers contributes a net positive public benefit in terms of paying taxes, not using public benefits, and helping others through volunteerism. Additionally, the theory of endogenous economic growth suggests that groups of well-educated people are more productive than they would be working individually or with less educated people. In summary, "the overall public benefits from higher education are greater than the sum of the individual benefits."[13].

The review of private and public benefits from higher education suggests that the benefits are not mutually exclusive but instead cumulative in both directions. Thus, higher education produces as an outcome, strong positive private benefits for the individual receiving the education cumulating throughout their life. Additionally, these same outcomes have positive externalities for the public which add up to a strong public benefit as well. In summary, higher education produces both private and public benefits suggesting that such an investment from a public or private good point of view has downstream positive results.

Even though the case for higher education having strong private and public benefits has historically been well understood and articulated, recently the value of higher education has come under scrutiny. These challenges emerge, in part, from an expanding economy for 11

[12] Williams 1988: 134

[13] Williams, 1988, 134

years with inflation of wages in traditionally blue-collar professions that do not require higher education. When compared to some professional positions, such as public school teachers that require a higher education degree, the blue collar careers seem more robust, challenging the notion of a higher wage with a bachelor's degree. Additionally, the cost of a public university education to the student/family has increased over time, exceeding inflation, as state budgets to higher education have declined. As the cost to the student has increased, the student has had to borrow more money in the form of student loans to complete the degree. The aggregate outstanding student debt load in the United States has exceeded $1,600,000,0000,000 ($1.6T) in 2020, passing home ownership debt[14]. Additionally, as the student loan debt has increased, default rates on student loans have also increased causing concern about future opportunities to achieve home ownership and other items attached to the American Dream[15]. These items are driving a conversation questioning the value of a higher education degree. With unemployment now beyond 13.3% due to the economic cycle and COVID-19, and unemployment highest for those who do not have higher education degrees, the conversation about the value of higher education, even with student loans, may subside until the next long economic expansion period[16].

State and Federal Subsidies-A Review

State universities are a private good that is funded from a variety of sources, primarily through tuition and fees paid by the student (customer) and the public through an annual state appropriation. The ratio of these revenues has changed significantly over time with state funding supporting the majority of the operating costs of a university for decades. As pressure on state budgets and growth in enrollment at state universities increased, the publicly funded state portion declined as a percentage to become a minority portion for most state universities today[17].

Examining these two main sources of revenue, tuition and fees (private) and state funding (public), suggests that there are two entities involved in revenue, the student and the state. This is not actually the case. Most students have to pay for part, or all, of their tuition and fees and living expenses[18]. To meet these expenses, many students borrow to pay for their higher education costs in the form of student loans. A large segment of student loans was federally insured against lost from the banks making the loans (thus the old term "guaranteed student loan"). Since 2010, most of the student loans are provided directly by the US Department of Education to the universities/students. This is a type of subsidy to the student directly, and

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[14] https://www.forbes.com/sites/zackfriedman/2020/02/03/student-loan-debt-statistics/#2f4b7ef2281f
[15] https://www.experian.com/blogs/ask-experian/how-does-student-loan-debt-affect-buying-a-home/
[16] https://nces.ed.gov/programs/coe/indicator_cbc.asp
[17] https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2019/10/two-decades-of-change-in-federal-and-state-higher-education-funding
[18] Living expenses can easily eclipse the cost of tuition and fees depending upon the quality of life being lived by the student.

indirectly to the state institution. If federal student loans were to disappear overnight as an option, most state universities would have to close their doors due to the significant loss of revenue. Thus, there are at least three parties participating, directly or indirectly, in revenue generation for the state university: 1) the state with an annual appropriation, 2) the student with direct payments for tuition and fees, and 3) the US federal government through the federal student loan program[19], making this a federal subsidy to state universities through the students in attendance[20] .

Recognizing that the US federal government is a large, albeit indirect, financial supporter of state institution is necessary when talking about challenges facing public universities. In fact, when examining the myriad of human resources policies and acts, Title VI and XI are two examples of federal laws that apply to universities because universities receive federal dollars in the form of student loans. Similar examples can be found around research dollars with the National Science Foundation (NSF), National Institutes of Health (NIH) and the National Endowment for the Humanities (NEH) as large funders of research and development in public universities which also place state universities under the scrutiny of federal regulations and policy[21]. With such a large percentage of the state university's budget coming directly (research dollars) or indirectly (federal student loans) to a state university, the term "state university" could be considered an oxymoron. The reality is that state universities are in fact state located, and the property state owned and employees state employees, but revenue sources, directly and indirectly, fall far outside of state borders and mostly in Washington, DC, with the exception being the state annual allocation. A case could be made that public universities are actually as much national universities as state universities considering the flow of federal tax dollars compared to the limited support from state legislators[22].

The University Products

A state university produces two primary products: an educated individual with credentials and knowledge in the form of research/scholarship and service. Each of these products will be viewed from the public good/private good and public benefit/private benefit points of view as well as the sources of revenue that contributes to the university.

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[19] Acknowledging that there are also private loans which are also in the market space but beyond the examination of this paper.

[20] For a history of the federal government in student loans see https://www.newamerica.org/education-policy/topics/higher-education-funding-and-financial-aid/federal-student-aid/federal-student-loans/federal-student-loan-history/

[21] https://www.ncbi.nlm.nih.gov/books/NBK373548/

[22] An analogy to the interstate system and the federal and state ratios of payments would be an interesting case study in comparison to examine.

Education/Degree

Most citizens view state universities as places where football games are played on Saturday…err, where people go to earn a bachelor's degree opening up better employment possibilities for their future earning potential. The value of the bachelor's degree is held as a private benefit as the graduate can leverage their degree to find gainful employment in any city, state or country around the world. The degree is both valuable and portable. The degree is simultaneously a public benefit in that the larger percentage of degree holders produces a positive spiral of public benefits articulated earlier in this paper. Thus, a city, state and country should desire to have the largest ratio of citizens with higher education as this maximizes the public benefit.

What sort of degrees should be offered, the price of that degree and the perceived value for price is constantly under scrutiny by all parties including: university administration, faculty, elected state officials, state higher education agencies, employers, parents and students and other participants. These debates are numerous revolving around who should produce and control the content of the classes that make up degree plans and who is eligible and intelligible to teach a class in this degree plan. Which degrees should be offered and why brings has at its core concepts of public good versus public value and private good and private value.

Elected state officials have been known to articulate the position that a bachelor's degree should be at the lowest cost possible, uniform in its content and delivery, and easily accessible to all citizens of the state with minimum friction to enter the degree program and complete it successfully. The confidence in which elected officials make such a statement reflects their belief that their annual state appropriation to the university, and the university as a state entity, should offer this as a public good, with a low cost and entry for all. As a product, they seek a commodity-like approach to where the same classes can be offered at all universities in the state and the variation in content and delivery will be near uniform and indistinguishable between them including price and access. Uniform, inexpensive, and accessible by all appears to be the driving force. This is best exemplified by the support of Western Governors' University (WGU) in the recent years which attempts to create this commoditized model as exemplified by WGU's "Our promise. We help our students achieve their dreams for a degree and career success by providing a personal, flexible, and affordable education based on real-world competencies"[23].

Students and parents often have a different point of view than that of a commodity public good for their education. Many seek unique programs, niche programs, programs that are both interesting and in which they can learn, explore and ideally become employed post-graduation. Having the same degree that their friend from high school who stayed at home is not appealing. They seek as non-uniform and customized an experience as possible. They are

[23] https://www.wgu.edu

customers. They are paying, directly or indirectly, for their educational attainment, and they seek innovation and uniqueness, not bland vanilla. They are consumers in the 21st century in the United States and have been raised with these expectations. To them, their degree is a private good with private benefits, and niche innovation and creative destruction in a dynamic and relevant curriculum is what they seek and are willing migrate to the university that best matches their needs and meets their price point. Additionally, these customers also expect the ancillary items related to being an undergraduate student such as athletics, groups, climbing walls, bars, clubs, Starbucks, and an enriching quality of life. This reflects the neo-liberal model view of a university education. All like Starbucks/Universities but each wants to order their own, unique, concoction drink/degree that represents them within this space. They neither want a single cup of inexpensive black coffee nor the same degree and university experience as everyone else.

Research

Research, like a degree from a university, has differing points of view in terms of its support and value. Historically, research was relegated to an elite group of private universities and then to public flagship universities. All other universities were more "teaching schools" which did not engage in robust grant funded research, leading publications, and other such trappings. The research conducted by these elite universities, whether basic or applied, was often funded by state dollars or federal dollars, and sponsored by the governments for the benefit of the citizens of the state or country. Thus, the knowledge gained from this research was a clearly a public good meeting both of the essential criteria of being both non-rivalrous and non-excludable. Findings, data, knowledge and insights were expected to be disseminated to relevant parties who could review, examine, replicate and further the research over time in the traditional method of investigation, all for the greater good. Universities in the United States act as a collection of national research and development laboratories serving the national state and the local states. As such, throughout the cold war, universities received research and development funding to support a myriad of efforts to fight, and win, the Cold War following on the model of the original land grant institutions and their role to help farmers mechanize and become more scientifically-informed with their practices[24].

Following the Cold War, the decades long use of universities to serve the state for national defense declined and has been slowly replaced with the need to keep the United States economically competitive and on the cutting edge of innovation. This is most frequently demonstrated by the triangle of investment capital, university research and a research park to generate innovation and move that through the stages to commercialization[25], all under the

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[24] Christopher Simpson, ed. *Universities and Empire: Money and Politics in the Social Sciences during the Cold War*. New York: The New Press, □□□□.

[25] Skilled science research base housed in area universities, plentiful venture capital, and steady U.S. Department of Defense spending were the traditional three pieces of the emergence of Silicon Valley in California.

tutelage of capitalists who have invested in products and processes to earn downstream revenue and profits. This transition from a tool of the state, for national defense which is the sine qua non example of a public good, to that of serving the needs of private sector firms, the definition of a private good, is still ongoing producing various challenges with non-disclosure, conflicts of interest, patent protection and a myriad of other items within a university which undertakes private sponsored research[26]. Moreover, the "teaching universities" often with a cardinal direction in their name, North, South, Middle, West, etc., began to engage in research and funded research breaking the oligopoly of the private research universities and the large flagship land grant universities in the states.

Wicked Problems

The wicked problems facing public universities in the 50 states and territories across the United States are both numerous and myriad and have been unfolding slowly over the past two decades. With the emergence of COVID-19 the cracks in the system have been exposed to light and the "COVID crowbar"[27] appears to be digging into these cracks forcing them apart creating an acceleration of the challenges that were already occurring. Some of the problems addressed in this paper include the ontology versus reality, of the concept of higher education as a public good versus a private good and the idea of public benefit and private benefits from production at the university. This is exemplified in the introduction of this paper between President Daniels at Purdue and Chancellor White of the California State University System which have staked out philosophically opposite positions of reopening of the public university based on their ontological, political and economic leanings of the university as a public or private good. Moreover, the strong influence of the federal government in public universities is often overlooked and should neither be ignored nor diminished as the federal government's resources and reach far exceed what any one state can replicate or challenge.

Solutions to the Wicked Problems

Message

State universities need an open, full, and engaged discussion on the realities of the present and the stark realities of the near future. The halcyon days of the past with public support of higher education from the citizens and the elected officials is over. We must accept this reality and become the authors of the narratives of our future, which at present are being written by all parties, students and parents, elected officials, the federal government and the private sector, except for us in the universities. We must get ahead of this narrative and define ourselves in a transparent manner, to be able to articulate the value of our offerings justifying our continued existence. Additionally, we must accept that we produce a private good that has both private and public benefits. Holding onto the notion of a public university as a public good is neither helpful nor productive besides being inaccurate. We need to exit the Sisyphus

[26] "Public Universities Get an education in Private Industry: Can academic researchers remain impartial if they are beholden to corporate money?" Molly McCluskey April 3, 2017, The Atlantic.

[27] Thank you for this phrase Lauren!

paradox of believing the public monies and appreciation for us in higher education is just around the corner as well. We need to justify our existence as a value to individuals and to the public and continuously share the precise and concise message at every opportunity to every constituent until they can articulate the values and benefits on their own without assistance.

Messengers

Universities are deliberately decentralized. This means that tenured faculty, directors, department chairs, deans, Vice Presidents, Presidents, Chancellors, alumni and members of the board all have voices, some of which can outsize others from the same institution. The potential for a mixed message from a myriad of voices drowns out any single message that is positive, precise and concise. Therefore, state universities, individually, and collectively, need to meet and agree to a simple positive message that justifies their existence, with supporting data to support these statements and responses to anticipated retorts by distractors[28]. Looking backwards and drawing upon justification based on history is not helpful, instead we must be forward looking. Once crafted, this message needs to shared, and all messengers trained, to deliver the message correctly and appropriately, over and over and over. If a university can centralize the message into just a handful of messengers, that would be ideal, but often this is difficult and unwieldy with a constituent being left out which can lead to them sharing a counternarrative which undermines the effort. Thus, all need to be able to articulate, and share, the same message.

Realities

The following facts listed below need to be understood, accepted, and actions, policies, and procedures within universities modified to accept this new reality. The realities are:

1. State funded universities will continue to receive less state money over time
2. The former days of strong state funding are not fiscally possible, even if there is a political will or desire to appropriate such dollars
3. State universities produce private goods with great private and public benefits in terms of degrees
4. State universities, directly or indirectly, are part of a national university system with a large percent of annual revenue coming directly or indirectly from the federal government
5. Students and parents act in a neoliberal economic consumption manner. This means they believe that as students they are customers and have choices
6. Unique experiences are desired by the students/customers and their families. The experiences and degree should be practical enough to land gainful employment while not being cookie-cutter
7. State elected officials still wield power over state universities even as the state portion of the university budget continues to decline. The assets of the university are still state property, the employees are state employees with state benefits, and the majority of the students attending the university are citizens of the state. Thus, even if annual state appropriations go to zero dollars, the

[28] 60, or half, of the presidents of the California community college system met to form a new partnership with the USC Race and Equity Center for action on diversity on their campuses (Chronicle, 11 June 2020). If the George Floyd case can bring these presidents together so can planning out the future of public universities.

state still has influence and thus needs to be both respected and educated in how the university works, its mission, and values as a private good with substantial private and public benefits[29].

8. The private sector hires most of the graduates from state universities. As the main user of the products produced, people with degrees, there needs to be active, open, and ongoing dialogue between the private sector employers and the university in terms of curriculum development, skills and degree plans. This does not mean that the concept of the liberal arts education must disappear and be replaced by a degree in computer science. It means that employers need to understand the value that universities bring in terms of critical thinking, learning, knowledge and innovation that are often overlooked or misunderstood or undervalued. The burden is on the state universities to make, and sustain, this connection over time. When trust is built, the private sector can become a strong ally in state and federal support of public higher education if they see the benefits to their companies directly from the products produces rather than trying to start their own universities out of frustration[30] .
9. Universities are not a private sector business. However, we can, and should, adopt many of the precepts and tools of the private sector to stay alive and thrive. These include, but are not limited to, understanding revenue generation and new opportunities, customer behavior and choice, ability to add new offerings quickly and shut down poor performing units before they drain the enterprise of valuable, finite, resources. Additionally, we need to know our product better than anyone else and know the value and price point for the product in the current marketplace and what risks are on the horizon which can disrupt our product, value and offerings.

Public-Private Partnerships

There is no "Field of Dreams," "Build it and they will come," in public universities[31]. If you build it, they may not come. And if they do not know about it, they certainly will not come. And if you build it without considering the needs of the student/customer, they will know and will reject it and laugh, and create and share memes about it on social media.

If you create a new degree plan and curriculum, using the best practices that you learned in school, the best theories at your Google Scholar fingertips, and replicate those you find online from other universities, and create the classes and objectives and launch the degree, it may still fail to attract students. Today students seek to learn the skills needed to succeed today, and tomorrow, for the organization who hires people with their degrees and credentials. If this does not occur, a degree plan can decline precipitously and earn a bad reputation. I have had a number of conversations with people who hire our undergraduate students and a common trope is emerging. The summary statement sounds like,

> *When I hired your graduates, we were excited because they would bring the latest and most innovate ideas and skills to our business to remain competitive in our industry which is*

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[29] See the Virginia Higher Education Restructuring as an example

[30] https://www.insidehighered.com/digital-learning/article/2019/07/17/amazon-google-and-other-tech-companies-expand-their

[31] https://www.imdb.com/title/tt0097351/?ref_=fn_al_tt_1

always changing. We were both shocked and disappointed to learn that the students were using old technologies and techniques which have been out of date for years, if not decades, and we had to spend considerable time and money to bring them up to speed on our technology and practices to begin to add value to our business. We were very disillusioned. Can you help us with this?

New and innovative approaches to higher education are needed across the board. Curriculum development, credentials, research, development, social exchange, financing, building, fund raising, and much more. Consider Cleveland State University's 2 for 1 tuition promise for incoming freshman where they pay for their fall semester tuition and get their spring semester tuition for free[32]. This is a radical idea in public higher education, yet a well-worn path in marketing and the private sector, so much so there is an acronym as part of this idea, B.O.G.O.[33]. We should be celebrating such innovative thinking for higher education, while at the same time being a bit embarrassed that a 2 for 1 B.O.G.O. is considered being innovative in a public university. We need to exercise the much repeated phrase of, "We don't do it that way here" in public universities that has kept us from innovation for decades. All assumptions of the public university model need to be challenged and innovative approaches to replace, remove or radically reorganize each assumption, process and unit, examined. There is no better opportunity, or threat, than now, as the COVID crowbar continues to push deep into the public university and pull pieces apart.

Public-private partnerships have been around for decades. Higher education has broached this model in a number of ways mostly in auxiliary services such as food services, facility services, bookstores, and so on. These have been more akin to outsourcing non-core activities rather than a true partnership. The United States is a $20,000,000,000,000 ($20T) economy in terms of gross domestic product. The United States Federal government spends approximately $4,000,000,0000,0000 ($4T) a year or the equivalent of 20% of the United States gross domestic product. For comparison, the state of California has a state budget of $215,000,000,000 ($215B), 16 times smaller than the US federal budget and most other states have a much smaller budget than California. Thus, if a public university seeks capital for growth and innovation, the two largest sources of capital are the private sector and the US federal government. As the US federal budget is heavily tied up in defense spending (~25%) and entitlements (~50%), there is little room left for innovative investments. Thus, public universities should aggressively, and wisely, seek out private sector partners to create relationships where both parties benefit in both education and research. Such innovative agreements can produce a new revenue of cash flow for the university, lessons on marketing and market growth from the private partner, connection to best practices and future ideas for curriculum development and research, a private sector advocate in the state capital and in Washington, DC, and a positive, innovative, image to the public as a whole. In short, public-

[32] https://www.csuohio.edu/admissions/2-for-1-tuition-promise

[33] Buy one, Get one (B.O.G.O.)

private partnerships have the ability to help mitigate the challenges outlined in 1-9 above in the section on "Realities."

A successful private-public partnership means that each side gains, both in relative and absolute terms. This is not, "selling the university," or "giving away the university," or "selling our soul." This is an acknowledgement that public universities produce private goods, not public goods, and that public financial support for public universities will decline in the future no matter how positive they are viewed by the general public or elected officials. Thus, connecting with a partner(s) which has access to capital is a positive outcome for the future of the public university not a negative. Private partners, by partnering with a public university, gain access to many bright and talented researchers, graduate students and undergraduates. They also partner with a brand value, a university, which still has a positive societal value, which can add value to their own brand. What can occur, with the right mix of people, motivation, communication and capital is akin to what created Silicon Valley, but instead of around high technology research, investment capital, the United States Department of Defense, and university labor only, this will bring all pieces of the university to the table for new ideas and innovations that we have not yet seen emerge outside of the Silicon Valley case study. But it takes a non-traditional university leader to plan, organize, achieve, and maintain such a vision.

Leadership

To achieve the objective of the new, and unified, message, bring the messengers together, wrangle all of the players, and offer new, and innovative approaches to the business model of public higher education such as private-public partnerships, requires a new type, or types, of leaders than a traditional academic who promotes through the ranks over time. I am not suggesting, as others have tried, to put a COE, politician, or a former military general in charge of university and believe that the university will transform into a profit-making enterprise, a political staff, or a military unit who follows orders as directed. Instead I am suggesting that persons with specific personality traits that embody innovation, creativity and entrepreneurship which are needed to enter and succeed in this brave new world of public higher education. This person may, or may not, come from the academic ranks, but this person must absolutely understand and sympathize, if not empathize, with the role of the tenure track and tenured professor within a public university. Failure to do so will fail to move the university into the future successfully, he or she will instead bog down the university into infighting causing more damage than before they arrived[34]. This leader must be an excellent team builder, innovator, problem-solver, constant communicator, and not be afraid to make the difficult decisions needed knowing that there is no way to please all parties all of the time,

[34] See President of the University of Alaska seeking University of Wisconsin top job as an example. https://www.chronicle.com/article/a-dark-day-u-of-alaska/248982?cid=at&source=ams&sourceId=5197268&utm_campaign=campaign_1286728&utm_medium=email&utm_medium=en&utm_source=Iterable&utm_source=at

and broadcast that fact up front. To have such a leader requires boards of universities who hire such leaders to hire, and then fully support, such a leader, and not undermine him or her along the way. This leader will need to manage up to the board as much as manage down to the university faculty, staff and students to create this balance and trust over time all the while keeping all of the constituent parties informed and engaged in a positive and productive manner[35]. The leader needs to know finance, not just how to manage a spend down of a budget but know how to generate types of revenue, returns on capital, and investment opportunities. Most of these traits are not what is typically found in a university professor and people with such skills often do not enter into an academic career, instead, they become an entrepreneur, a business leader, a religious leader or maybe run for elected office. However, these people exist, we need them, and we need to find them, incubate them into the people they need to be in order to be successful in a public university and lead our industry into the future[36].

Re-Imagining Public Higher Education

Public higher education is caught in a spider web of financial pressures, political pressures and culture entrenchment all of which can pull in opposite directions making the university seem unwieldly, inefficient, and potentially ineffective to constituent parties damaging the reputation of the industry. Limited incremental reform has been tried, such as the Virginia Higher Education Restructuring case study, but has failed to move public higher education out of the mounting challenges. Thus, what is needed is a radical reform of public higher education and a deliberate, and conscious, choice by all constituted parties, to reimagine the public university to its new potential in 2020 and beyond.

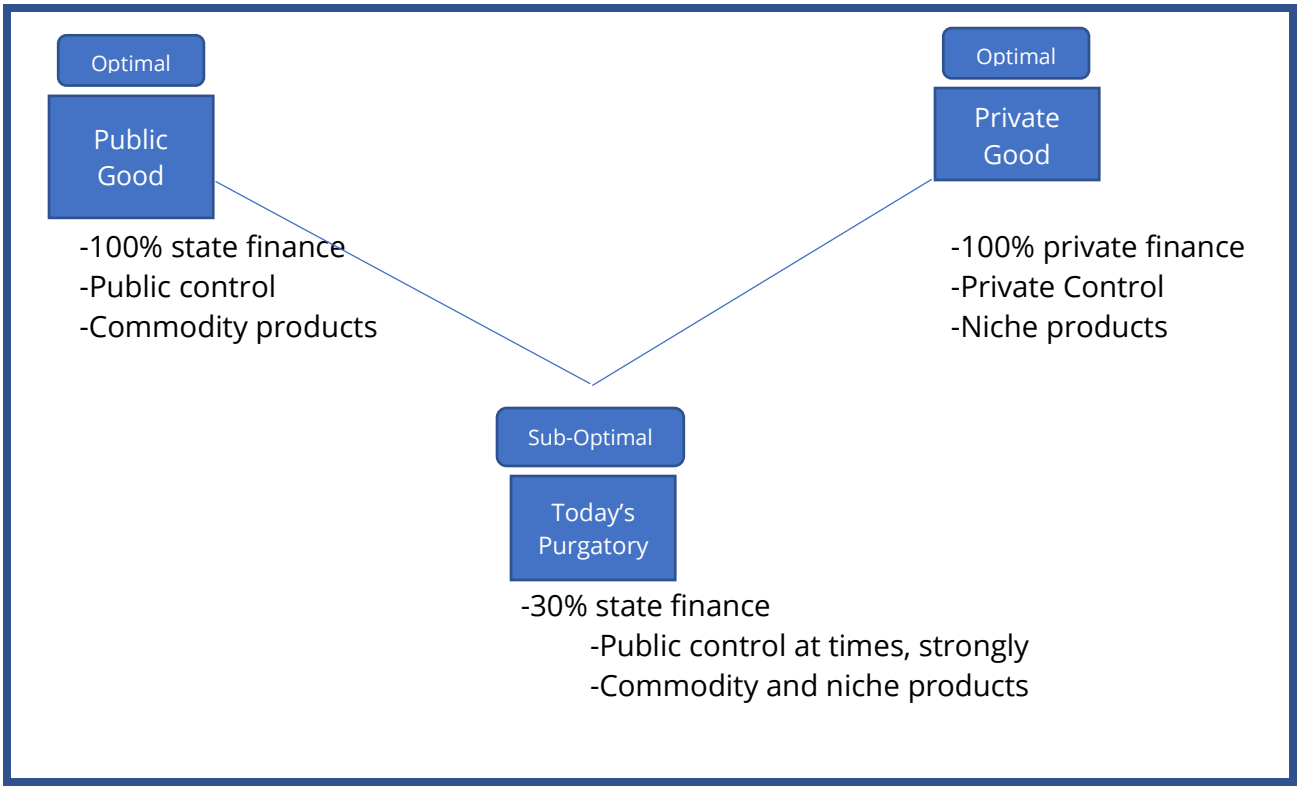
The ties to the state, financially and politically, are a type of chain that is at times loosened and at other times is pulled taught. For example, my institution counts on the state annual allocation as approximately 30% of its total revenue. As the legislature is back in session discussing the already passed budget, we are waiting daily with baited breath to see how much our budget is cut from revision to the forthcoming budget year. The time spent/wasted waiting on the political process of limited resources allocation is a lost opportunity cost. If public universities were more in control over their budgets and finances, decisions on how to move forward would have been outlined in April and May 2020 and would now be in an implementation stage in June 2020 for the budget beginning 1 July 2020. The meeting with the bankers, bond holders, and other such financial meetings and briefings would have established an estimated budget, any shortfalls, establishment of lines of credit, bonds offered with a particular yield, and with these revenues secured, innovation and maximum student recruitment and enrollment would be underway for classes in August 2020 as well as expansion of other auxiliary revenue opportunities and aggressive cost cutting plan. This is

[35] See *The CEO Next Door* book.

[36] Maybe we need Fellow's program within a state? Now, wouldn't that be a novel idea and one worthy of funding?

what small, medium and large-sized organizations did that produce private goods when the realities of the pandemic on spending and the macro and micro economic landscape was understood. If a university was truly a public good, and acting accordingly, a team of lobbyist would be at the legislature articulating the effect of enrollment, workforce development, and other downstream implications of various reductions in the state annual allocation to higher education to minimize its cut in the revised state budget. *Chart 1* below demonstrates the purgatory that public higher education finds itself in, betwixt and between two more optimal states, a pure publicly finance good and a purely privately financed good.

Chart 1: Betwixt and Between: The Purgatory of Today and Opportunity Paths for Tomorrow



If public higher education remains in the purgatory of between a public and private good ontology and actions that oscillated between these two, the industry will slowly whither on this vine. University leaders need to make choices either to fight for 100% public financing or 100% private financing and control. If they choose the 100% public financing route they do so knowing they will be turning over the control of the university, indirectly, to the state elected officials, and politics within the state, to fund what they deem desirable during that funding cycle. The products produced will be deliberately inexpensive as they are publicly funded, and will be a commodity and cookie-cutter like in their design and delivery. The goal would be access to all for "free" or a near as possible. The university leaders will have as their mission to be efficient stewards of the state dollars to enable free commodity education for the masses as a public good and for the public benefit.

The other side of slope out of purgatory is to embrace public universities as both a private good and the private benefits that accrue. There will be no public financing of higher education from the state. The products produced, education and research, will have a market demand and will be priced according to this demand and delivered in the manner the consumers need. The university leaders have as their mission to maximize revenue and margins so that the excess capital (we cannot use the term "profit") can be used to recapitalized new ideas and innovation and test market new products and services to consumers[37].

Financing public higher education is always the elephant in the room. If 30% of the revenue from the state were to vanish next fiscal year, but the university has full fiscal autonomy, what choices might the university leaders make? The options are numerous but could include the following possibilities: selling bonds, borrowing money from the bank, raising money from donors, leasing out space on campus, increasing the cost to the student consumer, cutting staff and faculty, eliminating athletics, selling property, and many more.

As an independent public not for profit university, the leadership can independently raise capital through borrowing, directly through loans from banks or indirectly through a bond issue. In return, the university will have to offer up some sort of collateral such as land or a building of a percent of future revenues in return. The university will necessarily have a business plan that will be scrutinized by the bankers or bond holders to ensure that the business plan is financially viable and the risk assumed is good. This means the capital raised is expected to be invested in a manner to produce more, not less, not the same, revenue, in future years, as part of the ever-present capitalist growth model.

Athletics is always an interesting topic of conversations for public higher education. Most universities it appears lose money with athletics and that the value of the branding, attendance at events, television revenue, and so on does note equal or exceed the costs except at a few elite universities in select sports[38]. Any talk of cutting athletics is followed by a cacophony of voices from alumni, donors, former athletes and legislators. If in fact, as some articulate, that athletics are, indirectly, an economic value to the university, then leaders will be able to test this hypothesis. Some universities will continue to keep athletics while others will cut athletics. One of the two sides will emerge stronger and with a better market position and eventually all will mold to that model. If athletics is such a strong and valuable part of a university, then alumni will collectively raise the capital to keep it intact or investors will jump at the opportunity to invest in this lucrative auxiliary for the university. Or, a university can float an athletic bond issue related to athletic revenues. If the bond issue if fully subscribed

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[37] As this author supports the 100% private good and private benefits model, the remainder of this section is a thought experiment on variations of this model. The other model, 100% publicly financed, can have the same thought experiment created in a separate paper.

[38] https://www.murphy.senate.gov/download/madness-inc

then that suggests that people believe athletics is a revenue winner. If no one wants to purchase bonds based on the ability of university athletics to generate more revenue than expenses, then the test will have its answer. If the athletic business unit is unable to raise outside capital, then the value of athletics was only to a few and the return on investment a negative one, and thus, as a business decision athletics will be cut from select public universities.

Research at a private good public university can be lucrative, but with a high barrier to entry. The university will necessarily have to invest in laboratory space and in high caliber researchers so that these persons have a place to work and conduct the research and go after research dollars to support the cost of themselves and maintaining operations. Such a relationship was established the research medical schools and the pharmaceutical industry decades ago. Those that established such relationships reaped substantial revenue, and at times, made poor scientific and ethical decisions in return for a "profit" motivation. In a business plan, the full cost of research will be known, building, supplies, people, insurance, electricity, parking, and so on and university leaders will have a choice to support this expensive, but potentially financially lucrative business unit of the university or decide that the expenses do not offset the revenue possibilities and exit the research business as they may have exited athletics. Research would then be regulated as a part of the educational mission of the university and undergraduate research becoming a niche offering for students.

In some communities the university owns a substantial portion of the real estate, is a major employer, and acts as its own city within a city. As a private good producer, it would make sense for the university to not separate itself from the community, but instead embrace the community into the campus. This would produce a positive feeling for the university in the community and in return, locals would look to the university as a provider of goods and services. This would be education, the main product, but could also include other products and services as well. If the university has an agriculture base, it may choose to become a larger player in the diary or beef industry. It may want to lease some of its space into an area for hospitality and recreation. It can option to become the community's main source of the arts so that the university and the community are not offering conflicting offerings. The potential here for non-duplication savings and revenue generation is large. The potential benefits of public-private partnerships were previously discussed in an earlier section. That model works well in this auxiliary space.

Tenure is always a sensitive topic around such discussions. The discourse too often degrades to a binary, eliminate tenure or keep tenure, as-is. The key tenet of tenure is its protection from outside political influence regarding the professor's teaching and research. If a professor examines something controversial, such as corruption in the state legislature, then legislators often call for the professor of such research to be "fired." Tenure protects this type of research that otherwise would not be undertaken due to the potential of being fired. Tenure has great privileges, which can include life-long employment security as long as some basic expectations are met. However, what is lost in such discussions are the responsibilities of tenure, which

seem to have disappeared or been diluted over time. There is both a responsibility and accountability to tenure. To hold it special and privileged and to police from within the faculty ranks so that those who earn it, and keep up the responsibilities of tenure, keep it, and those who do not meet the threshold and continued expectations, lose their tenure. The self-governing process of tenure appears to have diluted into granting tenure recommendations only by faculty and rare tenure denial, no effective continued performance evaluation, and rare tenure denial or post-tenure removal. Thus, tenure has its place and purpose, but it needs to be rarer and more preserved for those who actually meet and exceed the requirements and then continue to perform at a high level thereafter. Once the high level of activity declines, tenure can, and should, be revoked.

An alternative to tenure can be a rolling five-year contract that is tied to annual performance and articulated outcomes. If these outcomes are met, the contract can be renewed, if it they are not, the contract will expire. If the outcomes are met and far exceeded, a bonus structure can be used to remunerate the faculty member for their excellence. An institution with 10% of the faculty as tenure or tenure-track, 40% on 5-year rolling contract, and the other 50% being a mix of full time temporary and part-time temporary and graduate students can be successful model for a private good university.

As a state employee in a university, pay and pay raises are often strongly influenced by the state legislature. Paying above market rate, or peer-university averages, should be a desired outcome. Pay for the quality of the person you seek in a given field would be the expectation in a private good driven university. Not all faculty in the same department or division would be paid the same, and there would be no automatic raises due to salary compression. Merit based raises would be the norm, and if one person falls far behind the salary of the department, this would be indicative of weak productivity most likely they will not be renewed on their 5-year rolling contract.

Mergers, Acquisitions and Alliances

State universities often contract with suppliers and providers for goods and services independently from other state universities as if each is an island onto itself and the revenues do not come from the same or similar sources. Thus, one university may gain a favorable contract from a vendor where the other does not negotiate as well. Economies of scale saves money and allows leverage. If universities, within and across states, bound together in an alliance, the purchasing power would be enormous. Such benefits would come from being an independent public university offering a private good. Whether it is food services, a bookstore, software licenses or purchasing toilet paper, being able to buy in bulk produces great discounts without a dilution of the value of the product or service. The software I am using is not diminished because I am in a contract with the University of Alabama at Huntsville and Western Kentucky University. We each have the same abilities. The same thing with toilet paper. We each receive our allotment that we pay for, but as we are purchasing in bulk we pay

less for each roll. A purchasing alliance between universities is a rational action and one that should cross borders[39].

Some state systems act, in part, in this manner, as an alliance or system, with joint purchasing and sharing of information, but even most of these systems have much local autonomy and do not see themselves as part of a system but rather as a sovereign campus with independent faculty, staff and decision-making. When the "system" makes a decision, it is "imposing" itself on the campus, trying to undermine it or thwart its autonomy, thus, there is much education needed around this concept and more importantly its implementation and communication.

Universities should be able to go "out of business" and others should be able to merge or acquire one another. If a public university has enough capital, forms a solid business model, and knows of another public university that is in financial trouble and near insolvency, it would make sense for the fiscally stable university to examine the university that is underperforming to see if an investment in capital would bring out a larger share of revenue generation for both universities. This may be sharing of capital in the form of cash flow, as well as human capital in terms of faculty, students, and staff. This would be more akin to a merger rather than an acquisition but the financial aspects would work the same and control and leadership would move to the financially controlling party.

Concluding Remarks

The example at the beginning of this paper was that of President Daniels of Purdue and that of Chancellor White at the California State System each articulating a private good and public good points of view for their institutions in their choice to open or remain closed for on campus classes for fall 2020. No matter the personal politics, President Daniels is articulating the trajectory of public higher education in most states within the United States and Chancellor White the halcyon days of past that many seek to return. This is the wicked problem.

The bold solution is that of picking an ontology, and direction, and going forward with its implementation with tenacity. This may be the public good model or the private good model, it does not matter. Neither course is easy, and both can, and I expect will, have a place in the emerging higher education marketplace, and neither have assurances of success. However, evidence shows that the in-between place public universities are in now, what I call purgatory, is an absolute formula for paralysis of leadership and future decline of the once nationally revered publicly funded state universities. We are sitting ducks in a pond and we need to choose to fly a direction and build our new world to parallel the values of higher education that we hold strongest.

[39] See code sharing alliances and purchasing alliances by the US airlines

David Butler is the Vice-Provost for Research and Dean of the Graduate School at Middle Tennessee State University since 2017. Prior to coming to Middle Tennessee Butler spent 16 years at The University of Southern Mississippi earning the rank of Full Professor and launching the Call Center Research Laboratory. Dr. Butler has a doctorate in Geography from the University of Cincinnati, a Master's of Science in Geography from Texas A&M University, and a Bachelor of Arts from Texas A&M University. Butler's research includes: contact centers, race and tourism aviation, space, technology, and disaster resilience. Dr. Butler has published over 20 articles and books, given over 50 presentations and has over $2.7 million dollars of external funding on research projects during his career. Butler has also provided congressional testimony and expert testimony on contact centers and the US airline industry as well as being interviewed by national news outlets such as CNN and NPR. For hobbies David likes to spend time with family and friends, travel, running and reading.

The Individual Development Plan: First steps in Becoming a Learning Organization

Kelli Chaney, Tennessee College of Applied Technology - Knoxville

What does it mean to be an organization of learning and how do we facilitate growth and development of employees without using it as a performance measure? It's a slow process that simply does not happen overnight.

Leaders that transform institutions into better versions of themselves are deliberate artist. Not only do these leaders have a clear vision of the possibilities, they also have a firm grasp of what *is* and *is not* currently happening at their institutions. It's a matter of understanding the reality of the present and preparing intentionally for the possibilities of the future.

Mapping out a plan that begins with a vision that can be seen and felt by the faculty and staff and is so clear that people actually get excited about it, is the ultimate goal when creating a learning organization. The zest for visionary leadership that allows for personal growth and development from the inside out is powerful and is capable of bringing about lasting change. People become so committed that their collective resolve and enthusiasm will drive the culture of the organization, day-in and day-out.

Patience and persistence are critical components when engaging faculty and staff to prioritize and begin goal setting. They need to know-it, and feel-it, that the president and college administration truly care about their success and wellbeing. Making an investment in professional development for faculty and staff is a deliberate attempt to motivate and inspire the team to care as much about the organizational success as the leadership does. Ultimately learning together, and growing together.

By way of the individual development plan, every employee is empowered to control their professional destiny. Tennessee College of Applied Technology-Knoxville is making an investment in the personal and professional growth of all faculty and staff. For technical faculty, it is important to stay abreast of industry trends and maintain skills that are relevant to employers. Students need to be trained using the latest equipment with instructors that are well-qualified and innovative experts in their fields. For staff, appropriate professional development is just as critical. There is no better statement that describes staff development than this one by President of East Campus, Pima Community College District (AZ), Mary Retter who wrote about "some interesting and wonderful results" (2002, 1) she observed:

> Staff can make or break your college. They often lack the power and voice of faculty and administrators, but neither could function without them. Perhaps the single most significant lesson we have learned from NISOD is the importance not of *sending* faculty and staff, but *taking* them. The time spent with leadership is more important than a hundred presentations.

Individual Development Plan – What is it?

The individual development plan (IDP) serves as a guiding document that assist employees with identifying and a creating a pathway to achieve their short-term and long-term goals, both personally and professionally. It's like a partnership between the employee and the supervisor. The one thing the IDP is not, a performance evaluation tool or a one-time activity. It is constantly evolving and demands attention to be truly effective.

Benefits of the IDP to the Organization

Alignment and accountability are high priorities as we transform the college into a learning organization. With the IDP, the leadership of the college uses this tool to grow our own leaders and to identify those that desire to hold other positions within the college. Here are other benefits of the IDP:

- Provides administration with a better understanding of the employee's professional goals and aspirations
- Understanding of strengths and weaknesses of the individual
- Provides administration a tool for tracking needs and development plans of the employee
- Allows time for administration to adequately budget for professional development
- IDP aligns employee training with mission and values of the institution

Developing the IDP

Developing the IDP is five step process that requires interaction and much discussion between the employee and the supervisor. However, the employee is ultimately responsible for taking initiative to secure the training.

1. Pre-planning session by employee and supervisor to organize thoughts and draft notes
2. Employee/Supervisor meeting to begin discussion of employee strengths, interests, and organizational requirements
3. Preparation of IDP – employee completes document with input from supervisor
4. Implementation Plan – employee schedules training and makes budget request that is prior approved by supervisor
5. Evaluate Outcomes – supervisor and employee evaluate the usefulness of the professional development experiences and makes documentation on IDP.

Templates for Developing the IDP

While there are no real guides for developing an IDP, there are key elements that are important to consider (sample template attached).

- Employee name, position and pay band
- Long-term and short-term goals with projected completion dates

- Objectives linked to mission of the organization
- Objectives linked to the employee's development needs
- Training and development opportunities including formal classroom instruction, on-the-job training, online courses, webinars, and etc. Specific dates and required budget.

Conclusion

Becoming a learning organization and engaging employees at every level of the institution is key ingredient of true transformation. Equally important is knowing and accepting the harsh realities of where and how the organization is performing in the eyes of the public, the employees, stakeholders and students. Students are the heartbeat of the college and their success depends on everyone in the organization. No one is exempt from the responsibility. It's really that simple.

Speaking of responsibility, it is the president that must commit the resources for education and professional development for all faculty and staff. Being the driving force that facilitates a learning environment can be a powerful motivator for trust and employee engagement. Peter Senge states in an interview "that a learning organization is a group of people working together collectively to enhance their capabilities to create results they really care about."

Having a solid foundation to build a thriving culture rich in employee engagement, constant learning, and deep commitment begins with investment in the organization's greatest asset, its' people!

Kelli Chaney, President of Tennessee College of Applied Technology in Knoxville, leads with an entrepreneurial mindset and is a strong advocate for career and technical education. Her executive leadership in workforce development and community college entrepreneurship span over 15 years to include customized corporate training, K-12 partnerships, resource development, creation of an advanced manufacturing incubator, and start-up of a digital hub that supports remote career opportunities for displaced workers in Appalachia. She presented at national conferences for the American Association of Community Colleges (AACC) on the subject of broadband technology and innovation, and the National Association of Community College Entrepreneurship (NACCE) for her work in rural entrepreneurship and economic development.
President Chaney is a candidate for doctoral degree in Educational Leadership and Policy Studies at Eastern Kentucky University. She earned a Master of Arts in Community College Leadership and a Bachelor of Business Administration at Morehead State University. President Chaney is also a proud graduate of Prestonsburg Community College.
In her spare time, she is an advocate for Juvenile Diabetes Research Foundation (JDRF) and is the mother of Emily Hall and Seth Hall. Both are college students. She and her husband Bryan, reside in Powell, Tennessee.

Appendix

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY KNOXVILLE

Individual Development Plan (IDP)

Name:	**Date:**
Current Position Title:	
Current Credentials: *(examples) Jane Smith, Diploma, TCAT Knoxville, Diesel Powered Equipment Technology John Smith, AAS, Carson Newman College, ASE Master Automobile Technician; ASE Service Consultant*	

CAREER GOALS

(State your aspirational short-term and long-term career goals as positions you would desire to achieve/attain/reach.)

Are there strengths you would like to utilize that are not currently a part of your position description? Share specific examples.	
Please list below two short term career goals you would like to achieve in the next 1-2 years? And what areas do I need to develop to get there?	
Area of Interest/Position Title	**Competencies/Skills/Knowledge Needed (areas I need to develop)**
1.	
2.	
Please list below one long term career goal you would like to achieve in the next 3-5 years? And what areas do I need to develop to get there?	
1.	

DEVELOPMENT GOALS

(These goals are learning-oriented. They spell out the skills, knowledge and experiences the employee needs to either remain effective in his/her current job or support the employee's ability to take on new responsibilities and grow in his/her career.)

Goal #1:
Goal #2:
Goal #3:

DEVELOPMENT ACTIVITIES TIMELINE

(The following table helps you keep track of your work. List the tasks you plan on completing along with your expected outcomes and start date. Once completed, insert the completed date. You can add as many rows as you need to document your activities)

DEVELOPMENT ACTIVITIES	Identify Which Development Goal this supports	Date Started	Date Completed /Progress
1. Training Courses to Complete: a) b) c)			
2. Books/Articles to Read: a) b) c)			
3. Conferences to Attend: a) b) c)			
4. Additional Training or Other a) b) c)			

At the end of each fiscal year, please submit your completed IDP for use in improving the college's professional development for all staff/faculty/administration.

_____ _____

Signature Date

Educational Quality: How Do We Facilitate The Creation, Assessment, And Sustainability Of Relevant, High Quality TECHNICAL Programs

Susanne Cox, Tennessee College of Applied Technology -Morristown

As advances in technology continue to gain momentum, the expertise that employers' esteem and rely on is expanding. As a result, employer's perspective on addressing skills gaps has never been more important in the realm of workforce development.[1] Present day employers consistently struggle to hire and retain appropriately trained employees that exemplify the various technical competences necessary to enhance productivity and propel innovation. Addressing skills gaps that currently occur is relevant for the future of work and is vital to the prosperity of society, communities, and states as a whole. As skills and competencies of the workforce are reliant upon the quality of educational and training systems, it is inherent that educational strategies are designed through partnerships and alignment with business and industry needs. As such, the creation, sustainability, and assessment of quality technical education programs is significant to addressing the skills gap that currently exists.

For many years educational institutions have designed programs and curriculums around perceived workforce needs with inadequate regard for business and industry involvement. Consequently, there is misalignment between employer needs and the availability of technically skilled workers to fill vacant positions in lucrative technical careers. If current and future workforce needs are to be met, career and technical educational institutions must play the pivotal role in workforce development by constructing, supporting, and evaluating superior technical education programs that also incorporate robust business and industry involvement, collaboration, and partnership. Additionally, as countless career and technical professionals are retiring annually, the necessity to intensify the availability of competent workers is ever increasing.

Central to addressing workforce shortages is the creation of quality technical education programs. A well-designed curriculum encompasses relevant coursework that involves academic and technical rigor that preferably includes nationally recognized industry standards and credentials. Content must include application of experimentations/illustrations through hands-on activities that prepare students for existing jobs in the available job market. Most importantly, the extent of employer contribution to curriculum design is of paramount significance to meaningful instruction. To achieve optimal results, advisory committees comprised of industry leaders and educators within specific disciplines should partner together to meticulously consider appropriate coursework that is indispensable to the profession. In doing so, graduates are equipped, knowledgeable, and capable to meet existing employer's needs, as well as, possess distinguished credentials essential to the vocation.

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[1] Retrieved 28 May 2020 from https://www.brookings.edu/research/the-role-of-employers-in-addressing-the-skills-gap/

Of equal consequence is the sustainability of superior educational programs. To support and preserve program value, quality instructors are required in order to deliver outstanding educational experiences. Often the task of acquiring and retaining exceptional instructors is challenging as many career and technical education (CTE) applicants are experts in specific fields, yet do not hold particular teaching qualifications that are stipulated for vacant positions. As a consequence, the years of acquired knowledge and/or level of expertise cannot be considered which limits interest in available teaching opportunities. In order to circumvent this issue, employment considerations should not exclude affected applicants but rather motivate interest in contenders willing to acquire further educational credentials.

Likewise, well-equipped classrooms and labs which are primary to constructive learning experiences are costly. [2]Each year the U.S. Department of Education imparts in excess of $1 billion in support for CTE courses at both the secondary and post-secondary levels. The utilization of present-day modern equipment is of utmost importance in order for training to be applicable in the workplace; however, specialized equipment and/or trainers are very substantial costs to educational budgets. Frequently, educational institutions rely on assorted grant funding opportunities in order to secure adequate resources for such expenditures. Furthermore, the modernization of facilities should be emphasized so that learning environments are representative of current technological advances in the workplace. All of the aforesaid elements necessitate additional funding enhancements for career and technical education programs.

In the same manner, program assessment is another characteristic of outstanding technical education. Training programs are fluid and must evolve as changes in the workplace develop and occur. Therefore, periodic program reviews that incorporate industry feedback are necessary and critical to maintaining up-to-date coursework that is applicable and relevant. Involving industry advisors with curriculum plans/design valuations is pertinent and secures that innovative instructional strategies are discussed and developed. All assessments compel considerations of overall learning environments that are grounded in academics and project-based experiences that effectively equips students for success in both the workplace and future college involvement.

Mutually, employers and educators have diverse strengths and contributions concerning workforce development that are central to improving the lives and livelihood of individuals.[3] Employers are on the front lines and are experts on desired proficiencies that are critical to the success of their organizations. Likewise, educators possess the knowledge and skills to integrate meaningful learning experiences that promote problem-solving and critical thinking. Through partnership and collaboration, the creation, sustainability, and assessment of quality

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[2] Retrieved 15 April 2020 from https://www.educationdive.com/news/federal-programs-partnerships-can-defray-cte-costs/560483/.

[3] Retrieved 11 February 2020 from https://www.brookings.edu/research/the-role-of-employers-in-addressing-the-skills-gap.

technical education programs enables educational institutions to contribute immense validity to the role that career and technical education plays in workforce development. In the end, prosperous communities are the real winners when these partnerships are strong and all stakeholders are working together for a common goal, a well-trained technically advanced workforce.

Susanne Cox is Vice President of Tennessee College of Applied Technology in Morristown Tennessee. As a twenty-nine-year veteran employee of the technical college, Ms. Cox understands the importance of technical education and the value of obtaining the professional training necessary for advancement in today's job market. Years of experience in business administration and student services/financial aid within the college provide her with valuable insights into the needs of students, faculty, and staff. The value and rewards of careers in technical fields were imparted to Ms. Cox originally by her father, a skilled automotive repair technician that owned and operated a lucrative business for more than thirty years. Ms. Cox received a bachelor's degree in organizational management from Tusculum College in 2005 and recently attained a master's degree in education from Tennessee State University with concentration in career and technical education. She served as interim President at Tennessee College of Applied Technology Morristown during leadership change and currently serves as secretary for the Tennessee Board of Regents Academic Affairs Sub-Council. Ms. Cox is a graduate of Leadership Morristown and is committed to the wide-spread growth of technical education, student success, and community and workforce development. For leisure, she enjoys spending time with family and finds great delight in every moment spent with her two young grandchildren

Innovation through a Modernized Higher Education System

Bo Drake, Chattanooga State Community College

The last 90 days[1] have been historic to say the least. A worldwide pandemic fundamentally changed the way we work, the way we educate, the way we interact and how we live. The video captured murder of George Floyd reignited the flames of social justice and highlighted inequalities that many thought no longer existed. Our cities, states and country are struggling to develop meaningful solutions to these challenges. The foundations of long established systems and thought to be truths are being challenged. The system that we call higher education is fundamentally challenged by its delivery method, its accrediting bodies and its financial model. I believe our future can be bright, but the path forward is undeniably foggy. In the following pages, I will address these three big issues as I see them and offer a possible path forward.

The expense of higher education may very well be outpacing the value of its return on investment. That is a difficult, painful and scary statement to make. I recently met a 20 year old who returned from a big name, out of state SEC school. She had a wonderful experience there, but once her aid was exhausted and her dad changed jobs, she could no longer afford to attend. She is now living at home, waitressing and attending the local university. Did I mention she does not have a degree and is $80,000 in debt? Did I mention her major is communication? Did I mention she is borrowing even more money to attend the local university?

It is likely you know someone in that same situation, and for me, that is the worst part. As decision makers and people of influence, why are we allowing this to happen? According to Forbes, student loan debt currently sits at $1.56 trillion dollars. This exceeds consumer credit card debt by $587 billion dollars. We are all familiar with the statistics that a college degree leads to higher lifetime earnings, but is the current cost of higher education worth it if only 33 percent of students graduate in four years or 60 percent in six years? All in, we are asking our fellow citizens to *invest* nearly $25,000 a year in themselves to ensure a financially sound future.

For those who graduate with a degree and student loans, we know they will be repaying an average of $400 per month. Depending on the degree obtained and related annual earnings, this monthly debt can have an enormous impact on quality of life. This debt can force graduates into unfulfilling jobs, delay starting families and delay or derail the opportunity to own a home. Surely, there must be a better way.

I feel the need to acknowledge what I am about to suggest may be unpopular, thought of as impractical, or just plain crazy, but I do hope it leads to meaningful conversation. Innovation is not found in replicating the status quo.

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[1] For time reference this paper was submitted June 16, 2020.

Our current academic calendars serve as a function of our higher education business model. They are important because they help us budget and make plans. In our knowledge-based economy, with nearly unlimited access to information, I am not convinced knowledge gain and time-in-chair are related variables. To be clear, I am not suggesting we sacrifice quality in any way. I am suggesting that everyone learns at a different pace depending on the subject being taught. Our gifts, talents and strengths shine through when we meet a subject we love. Conversely, our weaknesses and areas of opportunity become known when we struggle. Yet our current model of teaching and learning treats both as equals.

Western Governors University has acknowledged these facts and built a system that provides individual student flexibility. Students are able to excel through subject areas they have demonstrated mastery over and yet provides additional learning time for more difficult areas. Is it a perfect model? No. Does it provide a template for something better we can strive for? Yes. The challenge of course is figuring out how to build this model for in-person and hybrid classes, but I know we can do this.

The benefits of a model like this outweigh the challenges. If our goal is to educate those attending our institutions and prepare them for the future, we must rise to the occasion. Being on-ground, we have the tactical advantage. Imagine a future where students that excel and master subject areas can more rapidly move to challenging subject areas and be afforded the time necessary to truly learn and overcome obstacles. Imagine a future where students are not burned out because they are not forced to continue running a race they have already finished. Imagine a world where students are able to accelerate their learning based on knowledge gain and not calendar countdowns. Structured correctly, I believe this change alone could lead to, higher enrollment, higher completion rates, less student debt and a modernized higher education delivery system.

In changing the delivery model, I also believe we must scrutinize our majors and institutional salary models. If we are to be truly innovative, we cannot afford not to address the elephants in the room. I am not suggesting we need to haphazardly cut programs or pay, but rather develop models that mirror our economy. We should not dehumanize our systems but we do need to be more data driven.

Enrollment in our programs should be driven by predictive labor demand. It seems misleading to over-enroll majors for which we can say with certainty that we will produce more graduates than opportunities exist. Preparing more students than the market has opportunity for, hurts all of us and drives down wage growth in those occupations. As institutions of higher education, I believe we have a duty to help educate students on the front-end of their journey. Local, state and federal occupation data discussions should be a prerequisite for enrollment into programs. Romanticizing the education experience at a price of $25,000 a year for a low wage occupation demands informed consent.

The Bureau of Labor Statistics publishes the Occupational Outlook Handbook. Students, parents and advisors can use this tool to help understand and explain job growth or lack-

thereof, as well as degree requirements and earning potential. I do not believe we should ever assume this information has been taken into consideration. Additionally, we can do a better job of helping students understand the financial commitments they are making. In a recent article published on the thesimpledollar.com, borrows lament what they wish they would have known before taking student loans. These include different finance options, monthly payment after graduation, opportunity cost, future earning potential and more. By in large, it is not safe to assume we have done all we can do to help ensure our students understand the commitment and investment they are making.

Innovation requires investment. As budgets tighten and the enrollment cliff nears, innovation has perhaps never been more important. The rapid acceleration of technology makes it even more challenging for higher education institutions to remain on the cutting edge. We must look at how and what we invest in. Though many of our campuses are in need of modernization and renovations, few likely need new buildings. These massive building projects compound our financial stresses and obligate us to long-term burdens that prevent us from focusing on what is most needed.

By investing wisely in the choices we make, we can better afford the talent that is responsible for educating our student population. Though we have incredible benefits, we are losing the wage war with the private sector for the best and brightest. All higher education employees should be paid as close to the private sector as possible. Administrative, staff and faculty salaries should mirror the private sector based on occupation. I believe over time, as we modernize our academic learning models, align our enrollment models and invest in innovation, we will be in a position to make this a reality.

Two more puzzle pieces must be addressed as we design a brighter future for higher education, accrediting bodies and employers. Accrediting bodies must become more flexible. Built to ensure quality, these agencies must develop more room for rapid change in the twenty-first century economy. As a result of the pandemic, they have demonstrated their ability and willingness to do so. Higher education institutions are often put at odds with employers because of ridged compliance requirements. I acknowledge their value, but the demand for modernization and speed is real.

The bonds between business and industry and higher education are centuries old. Yet the demands and strains of innovation are pulling at the foundation of these relationships. The speed of private sector innovation is diametrically opposed to the response of our institutions. Though our students believe they are prepared for the work for which they have been trained, our employers have a different view. Our systems must work together to ensure outcomes more closely align with expectations.

Last but not least, and perhaps most critically important, business and industry partners must increase engagement with institutions and provide opportunity for students. Due largely to rapid innovation and competition, industry is becoming more and more self-reliant. Our historically supportive partners are willing to pass on degree attainment and accept proven

skill as the indicator of future performance. In fact, according to Glassdoor, major companies like, Google, Ernst & Young, Penguin Random House, Apple, IBM and Starbucks will hire without a degree.

If we can increase our agility to align with industry needs, we will undoubtedly deepen and strengthen these powerful relationships. It is incumbent upon us to do this and also help those partners access the plethora of talent that exists within our institutions. Attending job fairs and offering limited internships is not enough. Today's student can no longer *bootstrap* their way through college while bartending. In order to meet market demands, remain relevant and competitive; we have to engage not just large businesses, but small businesses as well.

With so many companies, big and small, desperate for talent, degree attainment should not prevent students from earning career relevant experience and wages. As a father, let me share this analogy with you. My two sons love to play soccer. Now imagine if I told them they had to go to practice for two to four years before they were allowed in a game. Now imagine after years of practice they interviewed with local coaches for a spot on the team. Undoubtedly, the coaches would congratulate them on completing practice, but also ask the dreaded question, "*Do you have any experience?"* Of course, they would answer no, and move on to other candidates. Have we not squandered opportunity by creating an artificial barrier between practice and application? Would scaling the US version of apprenticeships not help alleviate talent gaps, employer satisfaction with college graduates and provide a meaningful way for student-employees to earn wages?

I consider myself fortunate to be a part of the higher education system here in Tennessee. We value education, innovation and opportunity. Our business model and modus operandi need to be modernized. The path forward will be challenging no matter which road we decide to take. However, I believe if we put our students, partners and employees first, we can create a more efficient model for the twenty-first century.

Bo Drake became Vice President of Economic and Workforce Development at Chattanooga State Community College in November 2017. Since joining the team, he spearheaded efforts to create the college's very first college sponsored registered apprenticeship program. He's served as an active member and later an advisor, for the Network for Southern Economic Mobility (NSEM). He studied at Harvard Business School over the summer as part of the Young American Leaders Program (YALP). Prior to, he served nearly five years as Executive Director of Corporate College for Ivy Tech Community College, in southwest Indiana. Bo is an Ivy Tech Community College alumnus and holds an Associate of Applied Science degree in business administration, as well as a Bachelor of Arts in speech communication from Northern Kentucky University in Highland Heights, KY and a Masters in Human Services from Liberty University in Lynchburg, Va.
He is originally from Columbus, Ohio, and resides in Chattanooga, TN with his wife and two sons.

Mission Possible: How Institutions Should Demonstrate their Relevance to a Skeptical Society

Dr. Steven Gentile, Tennessee Higher Education Commission

In a 2018 interview alongside incoming Harvard University President Larry Bacow, outgoing President Drew Faust identified "skepticism about the value of higher education" as higher education's greatest challenge. All other challenges stem from this skepticism. President Bacow agreed and went on to say:

> *…I think that the current narrative about higher education in the U.S. is one that we have to work really hard to change…. [P]eople are questioning the value of a diploma. They are questioning the value of these institutions to society. They are questioning whether or not colleges and universities actually contribute to the American dream. That's scary. We need to change that conversation.*[2]

The fact these two leaders, who served and were about to serve as presidents of the wealthiest and most selective university in the world, identified a societal lack of faith in product as *the* bogeyman should rattle every college president. If Harvard has to wrestle with skepticism, what hope is there for institutions whose biggest competitor for students is full-time employment? How can regional universities and community colleges convey to a skeptical society the value of their enterprise?

Given the approaching demographic cliff to hit later this decade[3], nonselective institutions have got to address skepticism to ensure viability. An enterprise leader of such an institution, however, must maintain fidelity to the institution's core mission, must respect shared governance, must meet the needs of the community, and, of course, must be in good standing with accreditation; she cannot simply make swift changes within the institution to address the public's misgivings. Rather, she needs to assess how best to identify, assess, and transmit the institution's value to society in a manner that dissipates skepticism. In short, as skepticism is the biggest threat facing higher education, she, and her board, needs to make the realization of this value her key job. Her institution's survival depends on it.

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[2] Walsh, C. (2018, May 22). Two leaders, one Harvard. *The Harvard Gazette*. Retrieved from: https://news.harvard.edu/gazette/story/2018/05/drew-faust-and-larry-bacow-on-learning-from-each-other/?utm_medium=social&utm_campaign=hu-twitter-general&utm_source=twitter.

[3] Kline, M. (2019). The looming higher ed enrollment cliff. *Higher Ed HR Magazine*. Retrieved from: https://www.cupahr.org/issue/feature/higher-ed-enrollment-cliff/.

Problem Statement

Skepticism of higher education is a wicked problem as most polls that seek to measure it differ in conclusions and in ability to extrapolate to any one institution. Further, if rationale for skepticism can be adequately identified, solving the issue can either weaken the institution's ability to meet its mission or disenfranchise key stakeholders, like faculty and alumni, who were attracted to the institution as it was. Skepticism of higher education is idiosyncratic to the institution and a solution that placates all stakeholders can be elusive.

Identifying the extent of higher education skepticism is complicated, although a downward trend is evident. A 2018 Gallup[4] poll of U.S. adults found confidence in higher education—registering at levels of "a great deal" or "quite a lot of" confidence—declined 9 points from 57 percent in 2015 to 48 percent in 2018. And although other polls, including a 2017 Pew Research[5] poll, argued this a partisan issue, with Republicans having the lowest confidence in higher education, the 2018 Gallup poll identified declines across party lines: Democrats declined in confidence from 68 to 62 percent, independents from 48 to 44 percent, and Republicans from 56 to 39 percent from 2015 to 2018. Skepticism of higher education, though stratified politically, extends to everyone.

But the same Gallup poll identified low confidences in all American institutions, not just higher education. In fact, of the sixteen institutions identified, higher education ranked fourth behind the military (74%), small business (67%), and the police (54%)—well ahead of organized religion (38%), public schools (29%) and, of course, Congress (11%). Americans appear to have high levels of skepticism toward all institutions. Had "apple pie" and "puppies" been included in this survey as institutions, we may find ourselves shocked with how society is turning on them, too. Properly assessing the extent and durability of higher education's skepticism—especially as a threat to higher education's viability—proves difficult when in comparison to other societal institutions.

Further, aside from political lines, identifying who rates higher education low and why proves difficult. A 2017 *Wall Street Journal/NBC News*[6] survey found skepticism to be driven by

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[4] Jones, J.M. (2018, October 9). Confidence in higher education down since 2015. *Gallup Blog*. Retrieved from: https://news.gallup.com/opinion/gallup/242441/confidence-higher-education-down-2015.aspx?g_source=link_newsv9&g_campaign=item_248492&g_medium=copy.

[5] Pew Research Center. (2017, July 10). Sharp partisan divisions in views of national institutions. *Pew Research Center*. Retrieved from: https://www.people-press.org/2017/07/10/sharp-partisan-divisions-in-views-of-national-institutions/.

[6] Mitchel, J. & Belkin, D. (2017, September 7). Americans losing faith in college degrees, poll finds. *The Wall Street Journal*. Retrieved from: https://www.wsj.com/articles/americans-losing-faith-in-college-degrees-poll-finds-1504776601.

Americans who had not attained a college degree, while a 2018 Teacher's College[7] poll found more positive opinions of higher education among traditionally underrepresented minorities in comparison to Asian Americans and White students, who have traditionally accessed college at higher rates. The take-away from the former poll is those who experienced college appreciate it while the conclusion from the latter is they do not. What to believe?

All of this is complicated by what these polls mean by "higher education." Similar to how Richard Fenno, with his eponymous Fenno's paradox[8], recognized "everybody hates Congress but loves their Congressman," a 2019 New America[9] poll found, in actuality, Americans have very positive views of their local colleges and universities while maintaining lower opinions of colleges and universities "across the United States." Everybody hates higher education but has a personal affinity toward their backyard institution. Skepticism breaks down when applied to specific higher education institutions rather than higher education as an institution. A college president must adequately assess the extent to which the community *they serve* is skeptical of her college.

Finally, any changes a leader makes to address skepticism within their community must gain buy-in from all interested stakeholders. With shared governance, a leader cannot make changes without faculty input and acceptance. If dependent upon charitable giving, a leader cannot make changes without addressing misgivings of donors and alumni. And a leader cannot make changes that weaken the institution's ability to meet its mission and accreditation requirements. Any solution requires an approach that placates multiple stakeholders. As a hard-to-diagnose and hard-to-solve wicked problem, resolving skepticism in higher education requires idiosyncratic assessment, full transparency, and iterative accountability.

Solutions

Value—or the absence thereof—underlies any perceived skepticism: is higher education worth the investment? As outlined above, many people believe so; many do not. Either way, the battle to overcome skepticism is one rooted in showing the value your institution claims to exude—to be accountable to the service you promise to offer. In other words, to not just be true to your mission but to convey to your constituencies just how well you have been true to

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[7] Teachers College Newsroom. (2018). An investment that pays off for society. *Teachers College Columbia University*. Retrieved from: https://www.tc.columbia.edu/articles/2018/july/americans-believe-in-higher-education-as-a-public-good-a-new-survey-finds/.

[8] Fenno, Richard F., Jr. "If, as Ralph Nader Says, Congress Is "The Broken Branch," How Come We Love Our Congressmen So Much?" American Government Readings and Cases. Ed. Peter Woll. New York. Pearson Longman, 2004. 383-390. Retrieved from: https://www.dentonisd.org/cms/lib/TX21000245/Centricity/Domain/894/Fenno%20Reading1.pdf.

[9] New America. (2019). Varying degrees 2019. *New America*. Retrieved from: https://www.newamerica.org/education-policy/reports/varying-degrees-2019/explore-the-data/.

your mission. Accountability to value, as Jon McGee[10] wrote in *Breakpoint*, is the only way to counter skepticism of parents and students facing growing tuition bills. And an institution's values should be conveyed properly in the institution's mission statement. Moreover, the mission statement, buried on a school's website, needs to be accessible to the public and clearly delineated with actionable and measurable goals. Finally, institutional leadership must be held accountable for how the institution is meeting the goals within the mission statement.

Accountability to an institution's mission measures the extent to which an institution's leadership upholds institutional integrity. Gaff and Meachem[11] identify institutional integrity as occurring when "educational programs reflect the institutional mission and enjoy the fully and informed support not just of the faculty but also of the board of trustees and the president, the primary stewards of the mission." Performance-based funding, a method of distributing state appropriations to institutions based upon pre-determined measurements reflective of institutional and state mission, is a case study in how institutional integrity can be supported.

Approximately 40 states performance-based funding, with some states, like Tennessee and Ohio, distributing all appropriations based on performance while others just a fraction. The rise of performance-based funding over the last decade originates from a need to solve the principal-agent problem[12]. Put simply, the principal-agent problem occurs when the principal (in this case, the state) has little to no control over how the agent it funds (in this case, the institution) operates, thereby yielding great distrust between the principal and the agent and jeopardizing future financial support from principal to agent. Performance-based funding has served as a solution for many states as institutions get to prove they are meeting both their and the state's goals. Anecdotally, in Tennessee, this solution has helped institutions make a better case for appropriations; state support to higher education has greatly outpaced most states[13]. Agent accountability held by the state has nearly erased any skepticism held by lawmakers.

The process to examine here, however, is how Tennessee's performance-based model was created and is maintained—for it has relied heavily on multiple stakeholder buy-in. The Formula Review Committee—a statutory group comprising institutional leadership, elected senators and representatives, and the Commissioner of the Governor's Department of Finance

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[10] McGee, J. (2015). *Breakpoint: The changing marketplace for higher education*. Baltimore, Maryland: Johns Hopkins University Press.

[11] Gaff, J. & Meacham, J. (n.d.). Learning goals in mission statements: Implications for educational leadership. *Association of American Colleges & Universities.* Retrieved from: https://www.aacu.org/publications-research/periodicals/learning-goals-mission-statements-implications-educational.

[12] Tandberg, D.A. & Hillman, N.W. (2014). State higher education performance funding: Data, outcomes, and policy implications. *Journal of Education Finance*. 39(3), pp. 222-243.

[13] Laderman, S. (2020). State Higher Education Finance (SHEF) Report. *State Higher Education Executive Officers Association.* Retrieved from: https://shef.sheeo.org/report/.

and Administration, to name a few—agreed upon the performance metrics to be used and how the Tennessee Higher Education Commission collected and defined data. The committee meets annually to adjust the formula; changes aren't implemented unless there is broad consensus. Nearly everyone who has a stake in deciding how much state appropriations to distribute *and* how to align appropriations with state and institutional mission has representation. Everyone is aware of what the metrics are and how they align with state goals. Institutions are held accountable and skepticism from the principal is mitigated.

The same robust process explained above should take place on every campus with regards to allegiance to institutional mission statement. Gaff and Meachem[14] recognize that the mission statement is "usually… a composite of ideas and recommendations from many constituencies," yet the president and the board "own" its implementations. But just as the state's Formula Review Committee outlines how an institution will be held accountable, the same multiple stakeholder group that creates the institution's mission statement must also be able to define how institutional leadership will be held accountable on fidelity to the mission. Put differently, external stakeholders must be involved in identifying *goals* associated with the mission—to more specifically examine when the institution is meeting its mission and when it's not.

And these goals must be displayed prominently alongside the mission statement. Arizona State University is a prime example of how an institution explicitly states it will be considered successful if held accountable to its mission statement[15]. ASU's mission is simply stated:

> *ASU is a comprehensive public research university, measured not by whom it excludes, but by whom it includes and how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural and overall health of the communities it serves.*

But the value of this mission statement is reflective in the goals set prominently below the statement on the website. Examples include but are not limited to:

- *Improve freshman persistence to greater than 90 percent.*
- *Enroll 100,000 online and distance education degree-seeking students.*
- *Enhance research competitiveness to more than $815 million in annual research expenditures.*

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[14] Gaff, J. & Meacham, J. (n.d.). Learning goals in mission statements: Implications for educational leadership. *Association of American Colleges & Universities.* Retrieved from: https://www.aacu.org/publications-research/periodicals/learning-goals-mission-statements-implications-educational.

[15] Office of the President. (n.d.). ASU charter. *Arizona State University*. Retrieved from: https://president.asu.edu/asu-mission-goals.

The ASU community and all stakeholders know how to translate ASU's bold yet vague statement (as mission statements typically are) into actual goals. And ASU leadership can then be held accountable to these goals.

The next step in accountability is *telling* stakeholders how well you are doing, not just showing them the goals. Unfortunately, ASU doesn't do so explicitly on their website. The University of Memphis, however, does[16]. Displayed prominently below the Mission and Vision and Goals is the university's dashboard, displaying prominently the lag measures most associated with the mission. On this site, stakeholders can see how well enrollment and retention metrics by college are growing, how much annual expenditures in research have grown, and how much faculty headcount have changed in comparison to the five-year range. What is not shown prominently, however, is how the changes in these metrics compare directly to the goals. Showing whether the institution is exceeding, meeting, or in need of improvement relative to the mission statement are the hallmarks of a good mission statement dashboard, as the National Higher Education Benchmarking Institute argues[17]. The University of Memphis, however, goes a lot further than most institutions in explicitly showing fidelity to mission.

To tie all of these disparate solutions together, higher education institutions can mitigate skepticism through a multi-step process that involves multiple stakeholder input in crafting the mission statement and goals, prominent display of the statement and goals, and an easy-to-track dashboard that quickly shows adherence and fidelity to the mission statement. Finally, much like how Tennessee withholds appropriations if institutions don't improve in performance, the multiple stakeholder group used to create the mission statement must convene annually to assess how well the president is performing. The assessment must be given to the board to discuss compensation and job performance and it must be distributed via media throughout the service area to prove to parents and prospective students that higher education is worthy of investment. Full transparency of how well an institution is meeting its agreed-upon mission will diminish skepticism.

Recommended Implementation

Step 1: Create a mission statement committee reflective of stakeholders—appointed by the governing board. The committee must include representatives from all stakeholders: faculty and staff, students, parents, alumni, local town/regional leadership, and administration. These stakeholders should be nominated from a represented body (e.g., the Faculty Senate) and

[16] Office of the President. (n.d.). UofM Dashboard. *The University of Memphis*. Retrieved from: https://www.memphis.edu/presweb/stratplan/dashboard.php.
[17] Seybert, J.A. (2012). Identifying key performance indicator: The foundation of an institutional dashboard. *National Higher Education Benchmarking Institute.* Retrieved from: https://planning.iupui.edu/assessment/institute-files/2013-institute/tuesday-2013/seybert2.pdf.

approved by the governing board. As this same committee will assess accountability, the president should not play a role in setting the committee.

***Step 2: Set mission statement for a pre-defined time (e.g., 10 years). Describe what it is the institution will do to meet the mission—the goals. Set how these goals will be measured*.** The mission statement needs to be set for a long enough period to provide stability and an engrained understanding of purpose. The goals may change from one year to the next dependent on how needs and situations change; therefore, the committee should meet and assess goals annually.

Step 3: Create dashboard that tracks how institution aligns with mission statement. The institutional research staff should work closely with the mission statement committee, the board, and the administration to determine the appropriate way to display adherence to the mission statement. The dashboard should tie specifically to goals set forth by the committee and should quickly and easily show how well the institution is performing in comparison to the stated goals.

Step 4: Convene mission statement committee annually to assess how institution leadership is performing relative to stated mission and goals. Report assessment to the board of trustees. The board should tie job performance review of president in part on how the committee assesses the president. The committee's assessment should provide a frank review of the president and identify in which goals and measurements the president is exceeding or underperforming. While the board may need to consider a multitude of elements when assessing the president's performance, adherence to the mission statement must play a prominent role.

Step 5: Advertise the mission statement committee's assessment. The wicked problem this process solves is the public's skepticism of higher education. As discussed above, the public loves their backyard institution but hates higher education in general. As such, to maintain this support and to keep skepticism at bay, the committee's assessment must be fully transparent and shared with the media. If the president and institution are performing well, such advertisement will be a welcomed marketing campaign. If not, the committee will need to take responsibility for conveying the message to the committee.

Step 6: Annually survey predominant service area to determine how the institution is perceived. The institution should survey their predominant service area (i.e., the local county if a community college; the region if a regional university; the state if the flagship institution) to determine the extent of skepticism. The survey should have detailed questions that get to the heart of any skepticism, allowing respondents to identify specific ways in which they have lost or won trust in the institution.

Step 7: Rinse and repeat. Finally, the committee should use this information to assess the strength of the mission statement and goals when it convenes annually, adjusting the goals accordingly and the mission statement at the end of the stated life of the statement.

An institution needs to be aware of two potential pitfalls. First, committees are notorious for getting nothing done. The board of trustees must, therefore, hold the mission statement committee in high regard *and* take its recommendations seriously. A committee whose actions are respected will take their job seriously. Second, a mission statement and goals must be rooted. As the president will be assessed based on accomplishment of goals, the rules of the game must be playable. Therefore, the trustees and leadership should have some negotiating power in setting the mission and goals.

Conclusion

Skepticism within higher education is both hard to identify and hard to solve. National polls and surveys do no justice to the local institution wanting to understand how the community feels about it. And any attempt by the local institution to dissipate any form of skepticism may risk alienating the institution to key stakeholders, like faculty and alumni. To really extinguish skepticism, the institution's leadership must show it to be accountable to the agreed upon mission statement. A mission statement committee comprising key stakeholders that meets annually, sets the mission and goals, is informed adequately on goal performance, and conveys assessment of leadership to the trustees and the public will mitigate any skepticism. Most importantly, this committee will set the framework that helps the president convey the institution's value to the community, helping her maintain long-term viability.

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Prior to THEC, he served as Assistant Dean of Admission and Financial Aid at his alma mater, Davidson College, in N.C., where he counseled and assessed admission and financial aid applicants in a selective admission environment. He developed a passion for higher education as an undergraduate student—a passion he identified after finding himself periodically reading hard copies of the Chronicle of Higher Education in the Davidson College library. Steven received his Doctor of Education in Higher Education Leadership in Policy from Vanderbilt University in early 2019. In his free time, he and his partner, Solvig, are raising their three-year old daughter, Austen, and one-year old son, Soren.

Innovation in Higher Education: Just Good Strategy

Michael B Hoff, East Tennessee State University

Higher education is one of the oldest industries in the world, as evidenced by the Platonic Academy, and higher education is foundational in the United States with many notable institutions being founded prior to the independence of the united states. This paper focuses on higher education in the united states but could apply to other regions as well. One of the reasons for higher education's longevity is the value of life-long learning and the impact on others those learners have throughout their life. Another reason, more specific to this paper, is the consistent cycle of innovation in higher education. This innovation is at times related to pedagogy, instructional delivery, cost/funding, to program diversity, and/or inclusiveness, as well as many others. The next cycle of innovation in higher education will likely be different than it was in the past because the very nature of innovation is being different. The concept of systemic innovation is particularly important right now not just because of the increased pressure of competition for enrollment and research dollars, but also because education, and by proxy learning, has been politized. In 2018 a Gallup survey found that just under half (48%) of adults in America have confidence in higher education, that percent plummets to just 39% for republicans. Regardless of your political affiliation this is a concern for the mission of higher education to increase education attainment of all communities. The most concerning result of the Gallup survey though is that the age group 18-29 has the lowest percent (41%) of respondents who think that a college education is important. Higher education has lost the attention of its core audience at a time when our funding and stature within the context of the 'public good' has shifted to performance or outcome-based models. In short if we do not innovate, our institutions will suffer, but more importantly our larger communities will suffer because prosperity is parallel to the education of the people.

The Problem

The first problem is defining innovation, like most buzzwords, innovation means different things to different people and in different contexts. If you search the 'definition of innovation' on google.com you will get autofill results for innovation in various areas like 'business innovation' or 'innovation in economics' indicating innovation requires context to obtain meaning. If you complete a search for just the 'definition of innovation' it displays the result "the action or process of innovating" – not a very clear definition. The listing goes on to state innovation is "a new method, idea, or product, etc." Based on the definition of innovation and following the associated links to any of the related questions about innovation the very notion of innovation can be summed up by saying 'something new'. Clearly, the definition of innovation is ambiguous at best and new is not always better. This poses the first problem – the need to establish the context and common vision of innovation within higher education and more specifically the institution.

In addition to the definitional issues, identifying innovation can be difficult, this is true in higher education as well. Even though Springer has a journal devoted to Innovation in Higher Education and I am sure there are examples of innovations in those publications, but not all things celebrated as innovation are innovation. The reason for the ambiguity is because leaders and institutions often claim innovation around specific topics within higher education – but with little evidence that innovation was achieved or that it can be replicated at other institutions. For instance James Madison is a great example of the innovation around student outcomes as indicated by the whole day they have devoted to student assessment. Additionally, current higher education publications laud the success stories of Georgia State University and Arizona State University to such a degree that many institutions have attempted similar strategies with little return. The point is that while we can find numerous examples of innovation by looking at success stories, it can be difficult to use those case studies to impact higher education more broadly within higher education. In summary maintaining innovation in higher education is part a definition problem and part an execution problem.

For the purpose of this paper the issue of innovation in higher education is best described by Steven Mintz, in a 2019 Chronicle of Higher Education article, "higher education needs to innovate, not for innovation's sake, but to increase student success". Mintz's article is highlighting the failure of innovation's that focus on the 'business' of higher education at the expense of student success but the quote is clear, if your innovative strategies don't increase student success then you have failed. I would go further to include post-graduate success. Higher education must become more aligned with employment outcomes and ensure the students who enroll, not just graduate, achieve their goals at the institution and beyond.

The Solution

The first solution for creating innovation in higher education could be to buy it – this is done frequently at the research and/or program level. That works well enough in some situations, but it does not create the kind of systemic culture change that enterprise innovation would seek to obtain.

Steven Mintz's 2019 article on innovation lists 10 reasons why innovation fails but it is also a good structure to outline solutions and closely aligns with the framework presented by John Kotter. Below is a rewording of Mintz's list and it provides a good outline for an innovation process – which is just a strategic planning process. That is all innovation requires is good strategic planning. The problem is that strategic planning in higher education has been relegated to a compliance activity that is based on specific times and is usually more of a collection of activities than it is a focused plan to achieve something. Or as Peter Eckel and Cathy Trower might say colleges should focus more on strategy than the act of planning.

Steps to creating an innovative environment.

1. Establish the problem and/or opportunity that needs to be addressed. Dr. Michael Crow of ASU did this well in 2002.

2. Develop a realistic and focused plan to address the opportunity. Examples are many but the framework at USC Upstate is a good start.
3. Effectively communicate an inspiring vision.
4. Involve everyone in steps 1-3 – higher education still has too much us vs. them particularly when it comes to serious decision at the senior staff level often faculty are on the receiving end of decisions not 'at the table'. Dr. James Votruba literally wrote the book on how to use the community to plan the future of an institution. This article from Cincinnati Magazine accurately depicts what collaboration means to an institution and its community.
5. Establish tactics that move from near-term to long-term and ensure the short-term tactics achieve success.
6. Remove institutional barriers. The daily work gets in the way of innovation as outlined in this Harvard Business Review Article. I would also posit that the recent FOCUS Act in Tennessee is a similar example of an agency removing barriers to institutional innovation that could and should improve higher education as whole. This is also a great example of decentralizing decision-making.
7. Do not invest in single ideas or persons, get departments or colleges to make long-term commitments to a strategy – and do not invest in just one idea. Decentralize the work and the reward while mitigating to some extent the cost of failure. By centralizing the risk but decentralizing most of the reward you can maximize the impact of innovation and ensure single failures do not stop innovation.
8. Institutionalize the initiative so that it lasts beyond the president or single leadership personnel. Nancy Zimpher is one of the best examples of this as she changed the trajectory of not one but two institutions – with the university of Cincinnati having lasting success.
9. Move faster than you think you should. Do not wait until you have the perfect answer before you act, ensure you have protocols in place that clearly demonstrate what is working and what is not working and pivot accordingly.
10. Incentives must align with the risk. The work must yield an acceptable reward or future innovations will likely be missed because of participants being risk adverse.
11. Support and invest in unit level innovations. Real innovation will happen one idea at a time and will likely come from those in the trenches not those in the tower.
12. Create a common set of metrics that can be used to track progress, innovation moves the needle more than other items and this will allow everyone to see when innovation happens.

There are many short-term demands of institutions and their leaders that can drive focus away from innovation and that is why there must be a transparent and formal commitment to innovation to ensure that when one leader or group is distracted others remain focused. Also, the fact that higher education's largest expense is on human resources that means the innovation discussion often becomes a very personal discussion.

In summary the solution to a lack of innovation in higher education is to focus on students, employees, and the larger community. Really listen to what those stakeholders need and move the institution in a direction that meets as many of the those needs as possible. The future of higher education for many institutions will not be about US News it will be about the local paper and to win there requires leaders to listen, guide, and when necessary admit failure and pivot.

Implementing Innovation

When implementing these strategies, they do not have to derive from the top level of management but do need their support. So often in higher education we tend to operate in rooms of six. The idea that six people at the top would have the information necessary to achieve success or be directly impact by the outcomes at a level that emphasizes the importance of the actions is naïve. The work must be done within units. To that end an institution must change structure, budget, and planning processes, and often personnel to ensure that an innovative environment exists. Some components of implementation:

1. Establish a clear vision of the institution that is grounded in the community the university most directly serves. The Committee for 125 Process at ETSU is a good example.
2. Decentralize budgets. While this can be risky, and evidence would suggest this budget model increases downward pressure on the humanities, it is essential to growing innovation because when done well it can reward innovation. Additionally, the model creates transparency in a process that is frequently the discussion of shared governance.
3. Set aside a strategic pool of funds that can be used to offset the cost of failures. Also, do not be afraid to 'celebrate' the failures. I am not suggesting they be rewarded but for them to be transparent.
4. A lot of communication and transparency around the first three. Establish small workgroups and standing constituency groups – not just formal committees – that can be used to initiate rapid feedback and keep leadership connected to the campus.
5. Celebrate success, particularly early success. Enterprise leaders have the biggest microphone and should use it to celebrate good examples of innovation.
6. Steve Mintz later in 2019 wrote another article that further details ways of implementing innovation.

Do not Mistake Action for Innovation

Innovation is about execution – therefore it is so hard to replicate, it is not just going through the motions – it is a state of being. As with anything that hinges on execution failures will exist and risk must be calculated and transparent to all who participate. Executing on innovation is further complicated because many institutions operate on the margin and have little resources to survive multiple failures – which is the best method of innovation – fail forward faster.

As an example of how difficult this can be, in 2019 EAB listed *The 6 Most Innovative Colleges to Watch in 2019*, among the list was Ohio University. During the same year, the Ohio University's Chapter of the AAUP published a paper about the budget crises at Ohio University that detailed sever budget problems. The results of the crisis are apparent now in response to the COVID-19 Pandemic and the subsequent vote of no confidence in the president and finance VP. It is also no coincidence Ohio University was using a decentralized budget model and there have been many articles that caution against its use. Although, a closer look at many of the examples of failed decentralized budget I would argue the failure was in one of the steps of strategic management not the model on its own. That is why the areas of attempted innovation selected at an institution must be clearly aligned with the vision and mission of the institution. It is not up to senior leaders to innovate directly but it is their responsibility to define the guardrails, set expected outcomes, hold participants accountable and when necessary keep the train on the tracks.

In summary, the act of innovating is not an event but a process that requires a cultural shift. In higher education it will require institutions to seriously evaluate their commitment to student success. CFOs will be required to ask first the question of they can best serve the academic mission not what results in a perfect audit or high composite financial index score, the later are important but only if the former is achieved. COOs will be required to better assess the impact facilities have student learning outcomes and the way human resources can create a student-first culture. CEOs will be encouraged to cheerlead and support but not meddle. CIOs must find efficient cost neutral ways to support the technology infrastructure of the institution and deliver high quality online experiences. Student Affairs officers will be required to ask not what the most fun or traditional experience is but how do they ensure all the student activities are a cocurricular component of the academic mission. CAOs and provosts must become more vocal in demanding this view shift because they speak with the full weight of the faculty and are best positioned to ensure student learning is considered at the appropriate level. In short, the institutions who innovate well in the coming years will likely be those who also have good fundamental management centered on student success. Like the examples listed here the act of innovation was strong management and was not as fun during the innovation as the current article that reference the success of that work attempt to relay.

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related to research, administration, and teaching. In 2016 Dr. Hoff was elected Vice President of the Tennessee Association of Institutional Research and served as president in 2018. Dr. Hoff obtained a BA in Political Science from the University of Cincinnati, a Master of Public Administration and Doctor of Education both from Northern Kentucky University.

Increase Cooperative Purchasing in Tennessee Libraries

Theresa Liedtka, University of Tennessee at Chattanooga

Higher Education is entering a period of heightened instability with the onset of the COIVD-19 pandemic. As a result, Tennessee campuses are running budget cut scenarios for state appropriation funding, implementing new online and physical campus solutions to address the COVID pandemic, and waiting for Fall 2020 enrollment figures to finalize. These anticipated budget cuts and other changes will challenge Tennessee academic libraries and require a thoughtful response.

The problem is that historically Tennessee libraries have not pooled financial dollars to purchase electronic resources collectively. For example, in 2018-2019, the University of Tennessee, Knoxville Library independently spent 12.3 million dollars on resources,[1] while the University of Tennessee, Chattanooga Library spent just over 2 million dollars[2]. These expenditures are primarily for electronic resources which include journals and journal packages, databases, books and book packages, media, and the software platforms needed to access the electronic content. Numerous cooperative purchasing models exist to provide real life lessons for Tennessee academic libraries. A consortia for consolidated cooperative purchasing can lead to millions of dollars in savings through cost avoidance, and expand access to paid subscription resources for members by negotiating costs and license features.

In working together Tennessee libraries can leverage the purchasing power of multiple state-supported academic libraries, and potentially private academic libraries, by implementing a robust cooperative purchase model, pooling resources, and jointly purchasing resources utilizing THEC as a coordinating partner. The International Coalition of Library Consortia[3] (ICOLC), a self-organized group of over 200 international library consortia of all types, is an excellent source for information including 106 consortia originating in the United States. ICOLC includes examples of broad statewide library purchasing partnerships, such as GALILEO (GeorgiA Library Learning Online) and more focused academic library purchasing efforts, such as Carolina Consortium or VIVA (Virginia Academic Library Consortium).

In coordinating the focus and manner of consortia operations, THEC plays a pivotal role in the successful implementation. For example, some consortia focus on expanding electronic

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[1] https://app.powerbi.com/view?r=eyJrIjoiMzczMGI0ZDMtOTZkMC00OGRiLTg1ZTMtZDliY2NhYjFmMDZhIiwidCI6IjUxNTgxM2Q5LTcxN2QtNDVkZC05ZWNhLTlhYTE5YzA5ZDZmOSIsImMiOjN9&pageName=ReportSectione674df93a0a05418a600

[2] https://wikilib.utc.edu/images/3/3f/2019_ACRL_Summary_Report.pdf.

[3] https://icolc.net

resources access for all members, while others focus on cutting member subscription costs. Ideally both objectives can be met. Other important infrastructure elements include a governance structure, funding model, staffing, and operations Finally, the commitment and support of many champions including legislatures, governing boards, faculty, and librarians from participating institutions is needed. There is no one size fits all consortia model. North Carolina has four different consortia representing libraries, while Georgia has just one.

Table A: Four Library Consortia in the Southeast United States.

	GALILEO	**VIVA**	**Carolina Consortium**	**Tenn-Share**
Focus	The goal is to improve library services for all Georgia residents	Provide, in an equitable, cooperative and cost-effective manner, enhanced access to library and information resources for Virginia's nonprofit academic libraries	Enables academic libraries in North Carolina and South Carolina to use bulk purchasing power to obtain favorable pricing on a variety of e-resources that are of interest to the scholarly community	Member-driven organization serving Tennessee libraries by providing cost effective resources and services that help them better serve their communities
Governing Board	25-member Steering Committee	14-member Steering Committee	Consortia members decide	16-member Board of Directors
Funding Source	Multiple sources	Legislature and participating libraries	Participating libraries	Legislature and participating libraries
Staffing	20	3.5	0.5	1.5
Standing Committees	2	5	0	11
Members	2,000 academic, public, school, and libraries	72 academic libraries	169, primarily academic libraries	700 public, school, special, and academic libraries

Notes of Interest	-Affordable Learning Georgia, an initiative to promote student success by increasing the availability of affordable alternatives to expensive commercial textbooks. $5.8 in grants awarded.	-Central and procurement offices on different campuses. -19.1 million in funding 2018-19. -More than $500 million in cost avoidance. -Open and Affordable Course Content Committee.	-The amount the members paid to participate in the consortium deals was 398 million dollars less than if the member institutions had each paid independently. -Focus is academic. - Distributed negotiations.	-Return on investment: All libraries: $7.68 in savings on databases and ebooks per dollar spent on membership AND a discount of 37% on Ingram Content Group purchases.

As indicated in Table A, Tennessee has a consortia, Tenn-Share. Tenn-Share provides numerous services, including cooperative electronic resource purchases. However, as Tenn-Share serves all types of libraries, its broad membership does not allow for a focus on academic libraries. For example, Tenn-Share uses its allocated State funds to pursue content suitable to all schools, including K to 12. Additionally, participation in Tenn-Share is optional and some of Tennessee's larger academic libraries have pursued more beneficial cooperative purchases and partners outside of the State of Tennessee. Thus, State dollars are not used to leverage the purchase for other state libraries.

Cooperative library purchasing is complicated business and drawbacks must be acknowledged. Local faculty and librarians lose fund control and a level of resource selection autonomy with cooperative purchasing. There is also a substantial amount of up-front time investment in establishing the aforementioned infrastructure components. With structures and funding in place, cooperative purchase operations are developed, and include detailed contract analysis, leading to the renegotiation of content access and pricing. It is understandable that many institutions, especially those with larger budgets, choose to manage their own operations.

On the other hand, it would be remiss to not to mention the numerous other potential benefits consortia provide such as shared print collections and collection development efforts, shared services and access platforms including a union catalog, cooperative interlibrary loan, larger market influences, shared staffing and training, shared storage and preservation efforts, and other ventures.

The COVID-19 pandemic requires higher education in Tennessee to begin hard conversations and to look critically at the cross-section of quality education, local operations, and funding.

One way to address this challenge, with no loss of access or quality is to require Tennessee academic libraries to work more closely and purchase together.

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What Is The Future Of Intercollegiate Athletics At Community College?

Connie Marshall, Northeast State Community College

At a time when community college leaders are struggling with low enrollment and decreased state funding, leadership at an institution might ponder if offering athletics would entice a new population of students. Questions would need to be answered as to whether athletics would garner a return on investment, and if athletics would actually fulfill the mission of the college. There are differing opinions on whether athletics provide community college students additional educational opportunities or whether athletics are considered co-curricular.

Community College athletics are governed by The National Junior College Athletics Association (NJCAA). The goal of NJCAA is to promote participation in community college athletics and confirm that it is a valuable component of the educational experience. Participation in athletics has the potential to shape a student's work ethic, teamwork and pride in the institution in addition to the academic aspect of college. The Tennessee Community Colleges Athletic Association (TCCAA) was established in 1968, and serves as Region VII of the NJCAA. The TCCAA fully understands the importance and endorses athletics at community colleges. The TCCAA further explains that student athletes at community college receive a two-fold opportunity, an outstanding education at an affordable price and the opportunity to shine in a sport that they love.

Problem Statement

Could the addition of athletics to the community college attract new students to the college and advance retention to graduation rates? There are many factors that must be considered, not the least of which is the added cost to the institution's already strained budget. A community college may seek community partnerships to help with funding, however the primary funding and marketing would fall primarily on the college.
There is little research on athletics in community colleges. The bulk of research extends to public and private universities. However, one study by the Carnegie Foundation for Advancement of Teaching summarized their study with these findings:

- Rural serving community colleges placed more emphasis on athletics compared
- To urban and suburban institutions and that rural medium-sized community
- Colleges offer a significantly larger average number of aided athletic scholarships, followed by rural large-sized institutions. Also they noted that women received
- Higher amount of athletic financial support than men did even though there are
- Not as many women in athletics as men (Morris, Modica & Miller, 2010)

Community colleges are well known for open access, technical degrees and transfer preparation. In Tennessee those individuals who desire to advance to a four year degree, may

start at a community college to use scholarship and grant money to fund the first two years of the degree. In Tennessee, ten of the thirteen community colleges offer athletics. The Carnegie Foundation identifies over 100 community colleges and private junior colleges that are not identified by their technical or trade programs. Having a defined identity strengthens recruitment efforts (Morris, Modica & Miller, 2010). The addition of athletics may provide the structure and identity that is needed. For a community college struggling with identity, the addition of athletics could be a viable conversation with donors and community member supporters.

Community College Mission

The paucity of research on athletics in community college reveals the need for each institution to first to decide if the addition of athletics supports the mission of the college. The community college mission is summarized with three prongs, commitment to access through open admissions, responsiveness to community need, and equity or a leveling of the playing field for students that may be first generation, low income, minorities and working adults by providing the necessary support to enable them be successful. Troyer (2015) posits by looking at multiple community college missions and scholarly definitions, the essential core mission is that community college provides access to higher education necessary for a productive life for individuals and healthy, and successful communities they serve. Athletics can provide substantial gain for students and a unique approach to serving the mission of the community college.

Cost of Athletics

University athletics are often partially supported through student tuition. Often the students may not know the extent of their tuition that goes to support athletics at their college. Four out of five of the 230 Division I Universities charge all students a fee to support sport teams as a part of normal tuition (Enright, Lehren, & Longoria, 2020). University leaders believe that their athletic programs benefit the college as a way to attract student applications and foster school pride. Additionally, the entire college benefits from donations procured from a strong community donor base secured in the name of the athletic programs. Community colleges will benefit from those same aspects of athletics. Community sponsorship may increase as athletics appeal to a broader constituency base than an academic team. Additional revenues may be gained from sporting events and auxiliary programs associated with athletics.

The Tennessee Board of Regents (TBR) is the governing board for community colleges in Tennessee. The TBR serves to support and control college athletics through publication of policies. TBR Policy 8:03 Financial Administration in Intercollegiate Athletics states "This policy is established to provide a necessary level of control and consistency among the TBR community colleges in the financial administration of intercollegiate athletic programs. The provisions set forth below represent standards to ensure program accountability, while allowing for institutional discretion and promoting intercollegiate athletic competition within the limitations of campus resources" (TBR 2020). TBR outlines sports that can be allowed at

community college as Men's basketball, baseball, tennis and golf with women's sports listed as basketball, softball, tennis and golf. Additional guidance conveys that tennis and golf are authorized for co-educational sports at community colleges. TBR Policy 8:03 further outlines how the community college should handle revenue, cost and expenses along with scholarships for student athletes and salary of faculty, to serve as a guide for college leadership.

Community college leaders may need to consider how much, if any is reasonable to add to tuition of their students to help pay for athletics. Students that typically are attending with the assistance of grants and scholarships and may also be working full time due to family responsibilities. At a time when state appropriations are decreasing, the call for the leaders to create and execute a well-developed plan to fund athletics may be the most difficult part of adding athletics to their community college portfolio.

Benefits of Athletics

Often athletics are not straightforward revenue makers for the college. They do however provide benefits to the students and tangible benefits for the college. Athletics provide that complete college experience to students. Students may want to engage in athletics for fun, for competition or to hone their skills to make them more marketable when entering a university at the completion of the two year term at a community college. A student may need to physically or emotionally mature, which the two year stint at a community college would allow, prior to attempting the university team.

The benefit that athletics provides to the community college, is a sense of community for the students and a sense of pride in the institution. Community colleges are often thought of as Commuter Colleges, which creates a situation where students do not spend time on campus after classes are complete. Additionally, community college students are often adults with family and other responsibilities, and leave the campus immediately after classes daily to attend to other responsibilities. Each of these conditions makes it difficult to instill a sense of pride for the college in the students. The additional of athletic events are often the catalyst to encourage students, faculty and community residents to reach a sense of pride in their community college. Rallying around a sports team, allows all supporters the opportunity to cheer on the common cause. The community involvement may increase as local high school graduates attend to play a sport and bring their supporters with them. The community support base through high school will move to the community college campus with the player.

There are several considerations for a community college president that might be considering adding athletics to their college portfolio. The first point that must be agreed on, is whether athletics would truly support the mission of the college. An open discussion with the leadership to decide whether the students in their college service area would benefit from athletics and if their college faculty and staff would rally around sports teams. A great starting point would be to solicit input from faculty, staff and students as to what sport(s) they would consider playing or attending games. Campus engagement would help advance the cause and get the team spirit charging forward. An additional question to consider is what sport would be

the best fit in the location of the community college. A campus that already had a building that could be converted to a basketball court or a softball field adjacent to the college would make a logical choice for the sport to be examined initially.

The second consideration would be whether the college could solicit community donors to help fund the athletic program start up. Community donors may be located for sports teams who were previously not interested in supporting other aspects of the college, The College Foundation Board would be crucial in gauging interest and helping secure donors interested in athletic teams and their expenses. This would be a step that could take many months to work through and would be essential to getting athletics started appropriately. Along with this search for community donors, the community college would want to survey universities in close proximity. A partnership with the university located nearby would make an appropriate next step for community college athletes. Forging those transfer agreements for courses and working with the sports teams could entice athletes that may need some time to mature academically or physically to start with the community college with the intent of transferring when maturity and skills are built. Making that transition to the university as seamless as possible will assist students with decision to start at the community college level with the ultimate goal of transferring to the university.

Could the addition of athletics to the community college attract new students to the college, develop a sense of community within the students and faculty while advancing the mission of the college? Sports are educational in the best sense of the word, as they teach the participant and the observer new truths about testing oneself, about the enduring values of challenge and response, about teamwork, about discipline and the power of perseverance (Chen, 2018). To survive and thrive, a community college must identify and successfully market their strengths, undertake efforts to increase their enrollment base, function in a fiscally responsible manner with limited state appropriations, and maintain strong leadership with devoted faculty. If the addition of athletics can be undertaken while accomplishing all these tasks, it may well garner a return on the investment while supporting the mission of the community college.

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Connie Marshall currently serves as Interim Vice President for Academic Affairs at Northeast State Community College. She is committed to providing quality certificates, degrees, and careers for her students to help make a difference not only their lives, but the lives of their families as well. Having been with the college for almost 20 years, she served first by creating an allied health program from inception to accreditation and subsequently served as Dean of the Health Professions Division. Working in the Dean capacity, she provided oversight and coordination for continuing accreditation for seven allied health programs.

She is currently a doctoral candidate for a degree in Educational Leadership and Policy Analysis at East Tennessee State Community College. She completed a Master of Arts in Education as well as a Bachelor of Science in Organizational Management from Tusculum College.

Each season with Northeast State has been guided by her desire to create positive relationships and seek ways to encourage others.

Her leisure time is spent with her husband - a fellow educator, a son who is a senior at UTK, and son and daughter-in-law who have made her a happy Nana.

Are Colleges and Universities Ready for Generation Z and Beyond

David Miller, University of Tennessee System Administration

Fewer students have been enrolling in colleges and universities in recent years and yet higher education professionals are predicting enrollment to rise in future years. Higher education leaders may be relying on historical patterns and misperceiving the choices available to today's high school graduates.

American institutions of higher education (colleges) have for decades depended on historical experience to create predictive models for enrollment management and financial stability. The typical formula tracks the college-going age as a percentage of the population; the historical percentage of that age which enrolls in a post-secondary institution; the percent by type of institution; the number of applicants; the yield from the applicant pool; and, finally those who enroll. This formula worked for many years.

The historical model may not continue to predict college enrollments. The formula worked because the potential college-going population had limited choices. That model is changing and colleges that do not adapt could risk their very existence. More than 70 American colleges have closed since 2016.[4] There are a variety of reasons a college may close, but student enrollment is generally the root cause.

In the fall of 2019, the National Student Clearinghouse Research Center, reported that there were 250,000 fewer students enrolled in colleges than in the fall of 2018.[5] Post-secondary enrollment has fallen 11% over the past eight years nationwide. This decrease occurred while the number of high school graduates remained flat. However, the National Center for Education Statistics[6] is predicting that college enrollments will increase 13.6% by 2026 from 2015 levels.

The historical predictive model is not necessarily reliable in a disruptive economy and culture. The rise of some of the largest growing companies have been disruptors, e.g. Amazon, Uber, Tesla, Google, Netflix, FedEx, etc. Walmart is completely shifting its business model from lowest price to convenience by growing online shopping. It purchased the online retailer FlipKart for $16 billion and increased its online business 43% in the U.S in 2018. Walmart is a

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[4] https://www.educationdive.com/news/how-many-colleges-and-universities-have-closed-since-2016/539379/

[5] https://nscresearchcenter.org/report-search/

[6] https://nces.ed.gov/

very large corporation with a solid brick and mortar supply chain system. However, they have had to react quickly and aggressively to the disruptors. Are universities prepared to react to the disruptors in educational delivery? Do we even recognize them?

Will tomorrow's high school graduates pursue a traditional four-year degree?

The simple answer depends on whether colleges can offer the highest value short-term opportunity. The concepts on which a traditional college degree are built focus on long-term rewards such as lifetime earnings. However, that value proposition is changing. With the rising cost of a bachelor's degree the return on investment has decreased. A college degree boosts wages for most people, but a growing subset of graduates are not seeing return on their investment.[7] There are three related shifts causing economists to re-examine the returns of college.

- First, the wages of college graduates have remained mostly flat this century, after inflation.
- Second, the cost of attending college has soared.
- Third, significant numbers of college graduates are failing to build the kind of wealth that previous generations did.

Potential Generation Z students perceive value in much shorter increments. Higher education literature is crowded with studies that instruct students that they will change jobs 10-15 times in their careers. Yet, colleges are still selling students on the notion that they should invest four-to-six years in a basic education before seeking an entry level job. For Gen Z students who are growing up in a fast-paced, quickly-changing, digital world, five years is an eternity. They have other choices today that did not exist in the past.

Ryan Jenkins[8] a Generation Z employment trainer and speaker specifies some key reasons that tomorrow's student may skip a four-year degree.

Escalating Costs

- Since 1978, costs increased 151.1 percent[9]; the median family income only increased 20.2 percent. Since 2004, there has been a 74 percent increase in average student debt.

Increasing Education Alternatives

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[7] https://www.wsj.com/articles/college-still-pays-off-but-not-for-everyone-11565343000

[8] https://www.ryan-jenkins.com/

[9] https://www.inc.com/john-white/learn-why-top-gen-zers-are-skipping-school-to-beco.html?cid=nl029week37day12

- Seventy-five percent of Generation Z[10] say there are other ways of getting a good education than going to college.

Lengthening Life and Innovative Times

- The question Generation Z is left asking is: How will a four-year degree sustain me for my 100+ year career in a high-flux world? Generation Z will have to be committed to continuous learning and will look to their future employers to deliver the just-in-time learning they need and crave.

Education is Going Corporate

- Generation Z is seriously considering forgoing a traditional college education to go work for a company that provides college-like training. And companies are preparing to pivot.

Shifting Priorities for Parents

- Many argue that the only reason college remains relevant today is due to societal and peer pressure. In the minds of many Baby Boomers and Generation X parents, you failed as a parent if your child didn't go to college. The priority is different for millennial parents. Only 39 percent of Millennials[11] believe a college degree "lead[s] to a good job and higher lifetime earnings."

Growing the Gig Economy

- Sixty-one percent of Generation Z[12] who are still in high school and 43 percent of Generation Z who are in college say they would rather be entrepreneurs than employees when they graduate.

The life experience of Gen Z is much different than previous generations; even Gen X or Gen Y. Some characteristics of Gen Z that will impact higher education include: obtaining information differently than any previous generation – almost exclusively digitally; they are post internet digital natives; and, they expect to participate in the creation of culture – not act as a consumer of it. This concept is counter to passively "being" educated which defines much of the four-year degree experience.

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[10] https://www.inc.com/ryan-jenkins/generation-z-vs-millennials-the-8-differences-you-.html

[11] https://www.wsj.com/articles/americans-losing-faith-in-college-degrees-poll-finds-1504776601?mg=prod/accounts-wsj

[12] https://www.inc.com/john-white/learn-why-top-gen-zers-are-skipping-school-to-beco.html?cid=nl029week37day12

How are innovative colleges and universities attracting Generation Z students?

How the question is framed is critical. The question may be asked; how do we attract tomorrow's students to the traditional four-year degree experience. This is similar to the horse-drawn carriage makers asking how they could improve on the carriage during the explosion of the automobile. You cannot. You have to go into the automobile business. How does that metaphor translate to higher education? I am not advocating abandoning the traditional bachelor's degree. Rather, I am arguing that it must be reinvented to remain relevant.

Some of the strategies being advocated for attracting Gen Z students merely attempt to use new methods to recruit students to the traditional educational experience.[13] These strategies primarily emphasize using digital communication to reach students. This will have only modest impact and may only help institutions compete for students who are already college–bound. It will take much more to reach the students who may not find a four-year degree relevant.

Tomorrow's students have a variety of options available after graduating from high school. The attractive options offering solid and progressive career paths include:

- Employer-provided training
- A growing service sector
    - Including highly skilled services such as pilots
- Creative professions such as web-based design and content
- Highly skilled trades - no longer just "blue collar"
- Entrepreneurs
- Substantial online courses (Harvard Extension, Coursera)
- A broad array of short-term postsecondary education with placement.

Traditional higher education institutions think of pushing the boundaries as "expanding the walls of our box". We tend to think stretching boundaries is doing the same thing just a little differently. When we are comfortable with the new box, then we'll consider the next box. The pace of change today – to which Gen Z students are accustomed – is fast, non-linear, simultaneous, and varied. To compete with these new options colleges must prove their value.

Of the brief research reviewed for this paper the findings indicate that colleges focus almost exclusively on "tweaking" the traditional college experience to attract and retain Gen Z

[13] https://www.admissionpros.com/blog/student-recruitment-strategies-for-attracting-generation-z#:~:text=awards%2C%20accomplishments%2C%20noted%20research%2C,help%20them%20once%20they%20graduate.

students.[14] It is unlikely that tweaks will be sufficient to prove the value of a four-year degree to tomorrow's students.

The four-year graduation rate for students attending public colleges and universities is 33.3%. The six-year rate is 57.6%. At private colleges and universities, the four-year graduation rate is 52.8%, and 65.4% earn a degree in six years.[15] This performance is abysmal. Lack of completion is especially a disservice to students who assume debt. It is similar to paying a mortgage on a home you in which you do not own. However, these statistics also reveal a tremendous opportunity. Colleges should focus on retention of enrolled students in new ways. Some ways in which colleges can encourage completion include:

- Providing credentials for incremental achievements along the way to a degree
- Decreasing the number of credits to obtain a four-year degree
- Change curricula to be more career-focused and meaningful
- Create high-value shorter-term degrees.

To truly serve Gen Z students colleges must first recognize that they are different than any previous generation and the extent of disruption coming to higher education. Colleges have traditionally competed with each other for students and are now competing with entirely new sectors providing career opportunities. The following are some ways in which colleges can adapt and remain competitive.

- Creating new programs including alternatives with shorter-term credentials.
- Increasing the value proposition and return on investment by substantially lowering cost.
- Focusing on dramatically increasing retention and graduation.
- Providing life-long learning as people progress through their professional lives.
- Dedicating efforts on driving down operating costs;
    - Consuming less space,
    - Increasing collaboration within the university and externally,
    - Diligently examine cost-benefit analysis of programs.
- Fostering and rewarding a contagious entrepreneurial spirit.
    - Exploring new ideas like faculty "profit" sharing.

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[14] http://connect.chronicle.com/rs/931-EKA-218/images/NextGenStudents_ExecutiveSummary_v5%20_2019.pdf?mkt_tok=eyJpIjoiTVRReU9UQmlNRGMyWmpnMyIsInQiOiJRN2tZN0RqQkxNWCtzVGtPbm1RZEQrQWFySSt6enFCSTIzbVN0N3ZkZnFKNVQweFFlSU9McUp2a29DcHhnYTBlc2lna1c3MlNDTUNCZkVFM1NMYU9pZmh5d1lPT2R4TW1RbXJDRytFYXoxSk5uZFU2cHo5eTlNUFpoU3pvUkdIMiJ9

[15] https://nces.ed.gov/fastfacts/display.asp?id=40

Higher education can thrive and lead the nation if its leaders focus on forward leaning ideas and innovative change. If leaders do not adapt, the future marketplace may bypass many colleges and universities which will slowly erode while their leaders merely complain about the circumstances in which they find themselves. In short, leaders must focus on student success rather than preserving the college status quo.

David L. Miller became the University of Tennessee Chief Financial Officer in January 2017. He is responsible for statewide financial operations, strategies, metrics, and control systems designed to preserve University assets and report accurate financial results. He assists the President in management of the University system and other duties prescribed by the Board of Trustees. The Office of the CFO includes the treasurer, controller, financial administration, investments, and information technology.

Miller worked in the University of Wisconsin System for 20 years. There he served as the senior vice president for administration and fiscal affair; AVP for capital planning & budget, and AVP for state relations. Miller began his career in Washington, DC in law, government and teaching.

A native of east Tennessee, Miller graduated from East Tennessee State University with a bachelor's degree in Political Science in 1984 and also earned a Master of Business Administration degree from the University of Wisconsin – Madison.

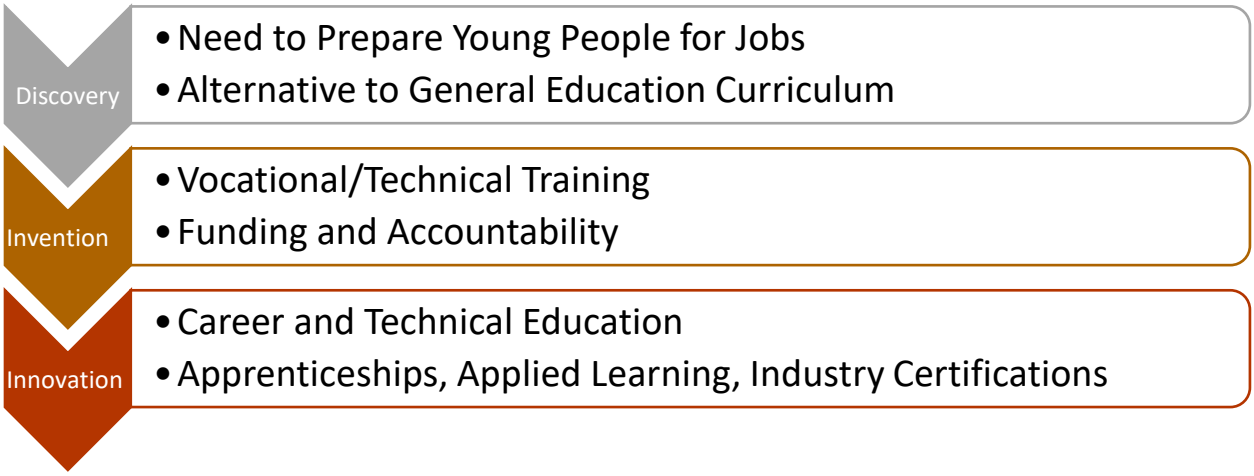
Miller has served on the board of numerous international, state, and local organizations. In addition, he has maintained guest lecturing in business, education, and government classes.

Technical Colleges: Innovative Difference Makers

Laura Monks, Tennessee College of Applied Technology-Shelbyville

"Let us open great vocational schools so our future workers can learn a craft and realize their full potential…" President Donald Trump, 2018 State of the Union Address

Established by the Smith-Hughes Act of 1917, vocational and technical training was seen as an economic need to prepare young people for jobs created as a result of the industrial revolution and to provide an alternative to general education curriculum of schools (Lynch, 2000). The *discovery* was the need for young people to be employed in new types of jobs. This required a preparation of a curriculum that was different from the general education being taught at every secondary and postsecondary institution. The *invention* was a different type of training for students and instructors as well as a different mechanism for funding and accountability. The *innovation* is a different type of education called career and technical education with different types of learning called apprenticeships, applied learning, and industry certifications just to name a few. To make this all possible, educators were and are required to approach the delivery of education differently when many of them had never experienced education in this different way.



Background and Problem

For the purpose of this white paper and as defined by the National Center for Education Statistics (NCES), a technical college is defined as a two-year college that grants sub-baccalaureate credentials such as certificates, diplomas, or terminal associate degrees in occupational education, or career and technical education (CTE) fields as defined by Hirschy, Bremer, and Castelllano (2011), to individuals seeking to enter the workforce with specific skills and knowledge (NCES, 2019). In 2015, approximately 1.4 million students graduated from a postsecondary institution with a sub-baccalaureate occupational education credential. This is an increase from the year 2000 when only approximately 885,000 students received a sub-baccalaureate credential (NCES, 2019). According to Levesque et al (2008), sub-baccalaureate

occupational programs include health care, business and marketing, computer science, engineering and architectural sciences, personal and consumer services, and trade or industry programs. As of 2010, these programs were offered at 59% of all postsecondary institutions comprising 50% of all postsecondary enrollment and 40% of all full time equivalency enrollment (U.S. Background Information,", 2012).

Problem: Are technical colleges seen as innovative difference makers? Technical colleges need to be seen as the innovators of a pipeline of skilled workers to fill a workforce gap.

The *American's Forgotten Middle-Skill Jobs* report by Holzer and Lerman (2007) states employment opportunities will be greatly be diminished for workers in the United States who do not complete some form of postsecondary education. This report and the realization that many skilled positions were going unfilled or risk being unfilled when a population of baby boomers retired are issues that many states are working to solve. In 2019, Tennessee Governor Bill Lee supported the funding of grants to form innovative private and public workforce training partnerships and work-based learning opportunities.

As noted by Barlow (1976) and citied by Wonacott (2003), vocational education as it is known today is a "20th century invention" with roots in the traditional preparation for work outside of a vocational school found in research as apprenticeships, involuntary apprenticeships, or family oriented training between a father and son (p.3). Due to federal legislation, career and technical education programs exist in secondary and postsecondary schools in the United States (Rojewski, 2002) to 'promote a greater focus on academic rigor, career-focused programs of study, articulation between secondary and postsecondary education, and greater accountability' (Brand, Valent, and Browning, The Federal Role in Career and Technical Education and the Perkins Act, para. 1, 2013) and to develop what was known as vocational education to be known today as career and technical education.

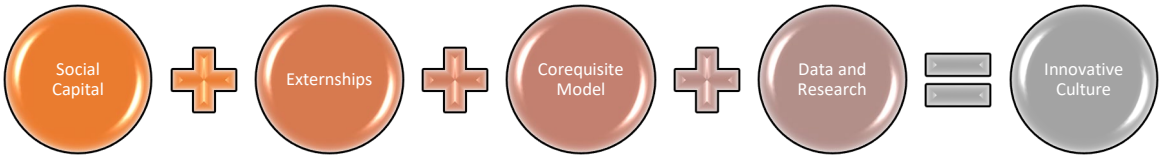
As the workforce demand for technically skilled individual increases, a discussion among workforce development collaborators continues as to how the demand can be met and sustained. Should technical colleges reinvent themselves to meet this demand? In order to reinvent, the technical college must change something so much that it appears new. Since technical colleges are only a little over a hundred years old, technical colleges are not in a phase to reinvent but to innovate a different educational option for students to meet innovative industry employment needs. Technical colleges need to be seen as innovative difference makers. To do this, an innovative culture inside and outside each technical college should be created by innovative educational leaders and sustained by the campus community of industry partners, legislative support, and mentors.

Solution

What is necessary to create and sustain this innovative culture? To create this innovative culture, a population of educational leaders ready to tackle the challenge of changing how

students view education is required. There is not a need for these educational leaders to have CTE experience but a passion for student success.

To sustain an innovative culture, expanded relationships, externships, research and data, and a co-requisite model for education may need to be considered.



Social Capital: a campus community built on relationships with industry partners, legislators, families, and mentors is needed. As Bourdieu's Social Capital Theory states individuals gain actual or potential resources based on relationships established due to a membership in a group (Bourdieu, 1986). According to Alfred (2009), social capital can be defined in one general statement, "it is not what you know, it is who you know" (p.3).

Expanded Research and Data: To determine the effectiveness of relationships and innovative initiatives, more data and research in the area of career and technical education is needed. According to the Career and Technical Education Research network, 'more rigorous research – studies designed to show a causal impact – on CTE programing is needed' (cteresearchnetwork.org, 2020).

Externships: Incentives for faculty, guidance counselors/advisors, and educational leaders to not just visit but to "walk in the shoes" of an employee working in a skilled trade for two to four weeks is necessary. This can be accomplished through well-developed externships with industry partners.

Co-Requisite Model: Career and technical education should be a co-requisite to general education in secondary schools. Career and technical education is the *how and why* to the general education *what*.

Conclusion

Career and Technical Education was discovered out of a need to provide an alternative form of education that trains young people for new jobs. This discovery has led to thousands of individuals realizing there are employment opportunities that appreciate the manner in which he or she can use their minds. These individuals have a unique talent to connect their minds to their hands to earn a living wage and become productive members of society. To stay true to

the discovery, career and technical education found at technical colleges should continue to be seen as different from general education. Technical colleges are innovative difference makers.

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Laura Monks was named the sixth President of the Tennessee College of Applied Technology Shelbyville on November 1, 2017 and the first women to hold this position at the institution. Prior to her position at TCAT Shelbyville, she served in various leadership roles at Motlow State Community College. An advocate for student success and workforce development, Ms. Monks has served students and communities for twenty-five years. Ms. Monks holds a Master's degree in Educational Leadership and a Bachelor's degree in Business Administration from Middle Tennessee State University. She is currently pursuing her Doctoral degree in Leadership and Policy Studies at the University of Memphis Lambuth Campus. Ms. Monks is a TN Promise mentor and is a member of the Fayetteville-Lincoln County Chamber of Commerce Education Committee, the Shelbyville-Bedford County Workforce Development Committee, the Franklin County Manufacturers Roundtable, and the Marshall County Advanced Manufacturing Council. Laura and her husband, Terry, live on their family farm in Fayetteville, TN where they raise beef cattle.

THE CHANGING WORKFORCE IN HIGHER EDUCATION AFTER COVID-19

Linda C. Spears, Tennessee State University

INTRODUCTION

"Education is the great engine of personal development. It is through education that the daughter of a peasant can become a doctor, that the son of a mine worker can become the head of the mine, that a child of farm workers can become the president of a great nation. It is what we make out of what we have, not what we are given, that separates one person from another." Nelson Mandela

Most higher education institutions have not been able to fully staff their workforce for a multitude of reasons, including budget constraints. These shortages are compounded with the onset of COVID-19 that began ravaging the country in January 2020. By March 2020, COVID-19 is recognized as a highly infectious worldwide pandemic. In a short period of time, many institutions had to make dramatic changes in their operations, cancelling in-person classes and transitioning to on-line instruction and remote work for most employees, particularly essential workers, those responsible for health, safety and building maintenance. For many institutions of higher education, this event was the first time there was a critical examination of requirements to fulfill the mission of teaching, research, and service. Providing alternative instructional delivery for the masses was a huge change. Many institutions had to gear up for on-line instruction, by training faculty and students to execute this alternative type of teaching and learning in a short period of time. Beyond that, there had to be sensitivity to all students' capacity to have computers and access to internet connections. All of these changes impacted the budgets of these institutions whereby 65% of expenditures are already allocated to salaries and benefits. How will higher education institutions cope with acquiring and maintaining a trained workforce with budget constraints post COVID-19?

II. PROBLEM STATEMENT

Prior to COVID-19, higher education institutions were experiencing challenges with hiring qualified faculty, particularly in the areas of Science, Technology, Engineering, and Mathematics (STEM). There was also a shortage of technically competent staff in the health professions to educate students for the full range of careers in the health sector. Shortages also existed for recruiting and hiring skilled craftsmen in all areas of facilities. High demands for talent in the various career paths have caused these shortages. Other industries are able to lure such workers at higher salaries, and a variety of opportunities to use their various skill sets. Higher education has not kept up with the supply and demand for these workers.

Many higher education institutions are grappling with requirements to prepare the existing workforce for the changed work environment and what is necessary to recruit, select, and retain new workers who must be assimilating into the new environment when campuses reopen.[1]

III. SUGGESTED SOLUTIONS

- EQUIPPING AND PREPARING THE EXISTING WORKFORCE FOR THE NEW ENVIRONMENT [2]

- Allow as many workers as possible to continue remote work assignments.
- Heighten communications and information sharing in the virtual realm.
- Provide basic and intermediate computer competency training to returning employees. Ensure that the training is flexible and available virtually and includes technical assistance.
- Specify and clearly define skill sets for returning faculty with a special emphasis on on-line teaching utilizing the best practices in distance learning and teaching.
- Increase broadband systems for internet connections and cybersecurity for all employees.
- Provide an array of training and resources for employees working remotely, to include coping with stress, financial planning, wellness, caring for children and the elderly, and other social interactions.
- Review and write policies dealing with the changing work environment.
- Provide unique training for supervisors to better manage remote workers and address different needs of the employees.
- Provide institution wide training on how leaders can become well-versed in benchmarking and measuring productivity in the changing work environment.

RECRUITUNG, SELECTING, AND RETAINING NEW EMPLOYEES IN THE NEW ENVIRONMENT [3}

- Realign recruiting strategies to allow for easier remote application and interview processes. Search
- committees will take on new roles.
- Embrace broad, comprehensive, and nontraditional recruiting processes that might include
- recruiting through special interest groups, and outreach to civic, social, faith-based, and alumni groups.
- Consider contingent staffing and outsourcing the work.
- Change advertisement to allow for transferable and broader skill sets to prevent prospective
- applicants from eliminating themselves from the applicant pools.
- Strengthen efforts to maintain a diverse workforce to include, gender, race, ethnicity, LGBTI
- status, and those who are differently-abled.
- Specify clear skill sets for new faculty to include on-line teaching ability.
- Streamline and expedite departmental and division processes for hiring faculty and allow for
- more transparency in the process while protecting candidates' privacy.
- Strategically define staffing needs to allow human resources professionals to fill the employment
- needs of the schools. Insist that the strategic direction of the universities be clearly articulated,

- understood, and so ingrained in the organizational culture and operation that hiring practices
- meet real employment needs.
- Consider hiring retirees who are returning to the workforce in greater numbers due to changes in
- their financial and familial circumstances as a result of COVID-19.
- Provide basic and intermediate computer literacy training to new staff.
- Reassess business practices and rely more on non-face-to-face contact. Management should
- measure services by efficiency and effectiveness.

IV. RECOMMENDED IMPLEMENTATION

According to the Greek philosopher Heraclitus, "Change is the only constant." COVID-19 is now dictating the unprecedented institutional change in higher education and particularly the hiring process. Business management guru, John Kotter, offers a model for change in organizations. That model can be applied to educational institutions for hiring policies and practices when campuses re-open. https://www.kotterinc.com/8-steps-process-for-leading-change

1. CREATE URGENCY– COVID-19 has already created an urgency for change because of the necessity of wearing face masks, social distancing of at least 6 feet, impeccable hand hygiene, and continuous institutional cleaning and sanitization. Much of teaching and research, the bedrock of higher education, rely on human interaction and personal contact.
2. FORM A POWERFUL COALITION OF TOP MANAGEMENT THAT BRINGS TOGETHER CHANGE AGENTS AND INFLUENCERS from a cross-section of functions and operations. Preparation and buy-in from at least 75% of top management with the support of faculty, staff, students, and alumni is essential for success.

3. CREATE A VISION FOR CHANGE, WHICH IS EASILY UNDERSTOOD AND QUICKLY ARTICULATED. THE VISION FOR HIRING AT INSTITUTIONS AFTER CAMPUSES ARE REOPENED IS TO:
   Seek employees who already have some computer skills for most positions; like flexible scheduling; have willingness to embrace diversity in all aspects of the work environment; have an attitude of compliance with COVID-19 regulations in the work environment; can work independently without close supervision; and have the ability to problem solve, to think outside-the box and to execute the new vision.

4. COMMUNICATE THE NEW VISION AND MANDATE THAT IT IS REPEATED POWERFULLY IN ALL ASPECTS OF THE INSTITUTION'S EMPLOYMENT PRACTICES FROM RECRUITMENT TO PERFORMANCE REVIEW.
   Address and respond to employees' concerns and anxiety. Always be open, honest and clear. Lead by example. The organization must create a roadmap for learning and skills-

building that is nurtured in an enabling environment. That higher educational environment must invest in and provide employees with the right tools for leveraging job growth and technological competencies. Learning must be tailored and customized for different age groups, roles, and levels at the institutions for optimal results.

5. REVIEW PROCESSES AND STRUCTURES THAT CAN IMPEDE CHANGE.
   Continually strive to remove barriers and obstacles to change which have the effect of empowering the employees who critically need to make the change.

6. CREATE SHORT-TERM WINS by evaluating job satisfaction within 90 days of employment.
   Early wins of meeting required standards are great motivators and can minimize the effect of nay-sayers and those opposed to change.

7. BUILD ON SUCCESSFUL CHANGE but set goals and incorporate continuous improvement in all that you do. Do not proclaim victory too early.

8. ANCHOR CHANGE IN THE CULTURE.

   Change should be a part of the essence of the colleges and universities. Organizational culture determines what gets done, so the values behind the vision for change must show in day-to-day operations. Leaders cannot be lukewarm about supporting the new employees and reassuring the existing employees. Leaders must talk about progress at every opportunity. If necessary, they must create such opportunities. Include change values and ideals when hiring and training staff. Publicly recognize employees who embody the new vision and who promote change.

V. CONCLUSION AND SUMMARY STATEMENT

COVID-19 has radically changed the dynamics of the workforce for higher education institutions. Even with changes such as the use of tele communications to enhance the interviewing of applicants, instruction of students, convening meetings, providing tutoring sessions, holding student/teacher conferences, conducting financial aid business, etc. more adaptation and change will be necessary when students, faculty and staff return to campuses.

Major colleges and universities are announcing hiring freezes for the upcoming academic year and even beyond. Earlier in the month, Brown University announced that all faculty and staff hiring is suspended through next summer. The University of Minnesota also announced the suspension of bonuses and job reclassifications. Governor Tom Wolf of Pennsylvania has imposed a freeze on hiring and non-essential purchases by all state agencies. Andy Brantley, President and CEO of CUPA-HR, agrees with the actions taken by these administrators when he said that “institutions are doing the right thing by freezing or carefully scrutinizing every current and potential search.”[4] Tennessee higher education institutions have not made such

bold announcements. These actions are executed to minimize potential financial hardships later for the institutions. Many view hiring freezes as a means to ward off layoffs in the future. Fewer full-time faculty means that institutions may not be able to offer and expand graduate programs. Some schools have gone as far to rescind verbal job offers. It is reported that institutions will be seeing 20-30% budget reductions for the upcoming academic year. Such cuts are causing greater use of part-time, adjunct, and non-tenure track faculty. Not only will there be greater competition for STEM and health faculty, researchers and skilled craftsmen, but there will be the stunning reality overall of doing more at universities with considerably fewer resources.

Employees, in general, will want to initially continue to work remotely or use the return to work call to retire, find another career or resign and enjoy themselves. Building a skilled workforce to adapt to the new work environment will require strategic transformations at the campus level. According to labor reports, most employees will require significant retooling in the next few years. Policy level changes are required for reshaping the workforce for the future. The new work environment will have signs all over the campuses reminding people of social distancing and precautions for coronavirus; health screening protocols; people wearing masks and/or gloves; multiple hand sanitizing stations; desk shield protectors; less in-person contact; greater use of tele and video communications; hybrid and on-line teaching; and more efficient ways of conducting business.

The importance of human resources departments will rise to a significant level as top leaders better understand the partnerships that are necessary for the survival of the institutions. Human resource professionals are called upon to re-shape the worker, the work, and the work environment. Employees must understand that change is imminent and rapidly forced upon them by COVID-19. Employees and employers must become adaptable, flexible, more communicative, and capable of continuous learning if the higher education sector successfully navigates the post-pandemic era. [5]

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[1] Agovino, T., Ladika, S., Roepe, L, Sammer, J, and Zeidner, R., “How the Coronavirus Pandemic Will Change the Way We Work,” HR Magazine, Summer 2020.

[2] Wilkie, D., “Into the Future: How a Pandemic Might Reshape the World of Work,” SHRM, 1 May 2020.

[3] Roles of HR and Senior Management in Workforce Planning, “Practicing the Discipline of Workforce Planning,” SHRM Daily Newsletter, 2020

[4] Flaherty, C., “Scores of Colleges Announce Faculty Hiring Freezes in Response to Coronavirus, Inside Higher Ed, 1 April 2020

[5] Jerath, A., “Winning Strategies to Build an Agile and Skilled Workforce for The Future,” SHRM, 19 December 2019.

Linda Spears is the Associate Vice President for Human Resources/CHRO at Tennessee State University in Nashville, TN where she began her higher education career in 2001 and fulfilled a life-long goal to work in that industry. Her areas of responsibility include all phases of people management and development. She is an operational improvement advocate who has developed a management leadership training program, introduced an electronic personnel action system and developed many highly effective workflow processes. She is very successful in collaborating with all areas of the university because of her spirit of inclusion.

A Southern Methodist University alumna, Spears received her B.A. in Social Sciences. While building an illustrious HR career in healthcare in Texas, Spears also earned an M.S. in Counseling at Texas A&M University-CC. In August of 1999, she moved to Edinburg, TX to serve on an executive leadership team to transform/reorganize a local mental health center to make it profitable.

Spears is passionate about people and bringing out the best in them. She has served in leadership positions on the boards of various organizations. She is a graduate of Leadership Corpus Christi-Class II and Leadership Edinburg-Class XII. She is a 2005 graduate of the TBR Maxine Smith Fellows Program. Spears is the consummate HR professional who has obtained certifications as a Professional in Human Resources (PHR) and the SHRM-CP (Certified Professional). She holds human resources professional memberships in CUPA-HR and SHRM.

Spears and her husband Marvin, a retired school administrator, are the proud parents of two adult sons and four grandchildren. Although she is a native of Corpus Christi, TX, she now calls Nashville her home.

What if we abandoned the traditional academic calendar? A strategic proposal for post-COVID-19 higher education

Jacqueline S. Taylor, Southwest Tennessee Community College

FOREWORD

The traditional academic calendar was created for an agricultural society. It no longer works for urban and global education. Especially in the COVID-19 era, higher education institutions have had to rethink their approaches to the academic calendar and archaic educational models which no longer serve society in the ways in which our society needs to be served.

According to Elizabeth Redden in her April 20, 2020 *Inside Higher Ed* article, the traditional academic calendar "is like the childhood blanket no one wants to give up."

However, recent events around the global pandemic have forced higher education institutions to reconsider the traditional academic calendar and how the teaching and learning process is administered, inside and outside the classroom, in order to better support the diverse communities we serve.

CONTEXT

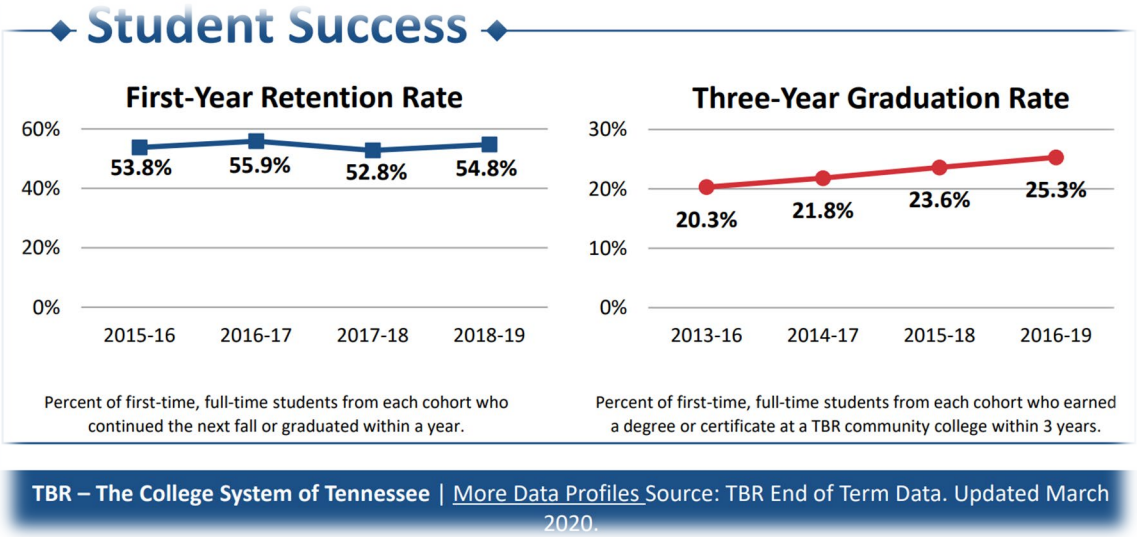
COVID-19 and systemic, institutionalized racism in higher education have combined to expose the inequities in educational and economic opportunities for those who most need access to quality, affordable higher education. Certainly, the digital divide which the pandemic has exposed, as well as the lack of technology access for rural and urban students in community colleges and public universities have been exposed and compel us to rethink the traditional model of higher education in brick and mortar classrooms set to a traditional, agriculturally-aligned schedule for communities which no longer operate on such schedules.

In Achieving the Dream's Webinar Series on "Teaching & Learning Through Disruption," President of ATD, Dr. Karen A. Stout acknowledged that institutions need to pivot and rethink online learning as a necessary exercise, which begs the question, does this new learning environment require us to ask the critical question of "What if we abandoned the traditional academic calendar?" This question opens doors to possibilities and innovations surrounding the distribution of and access to higher education under non-traditional conditions.

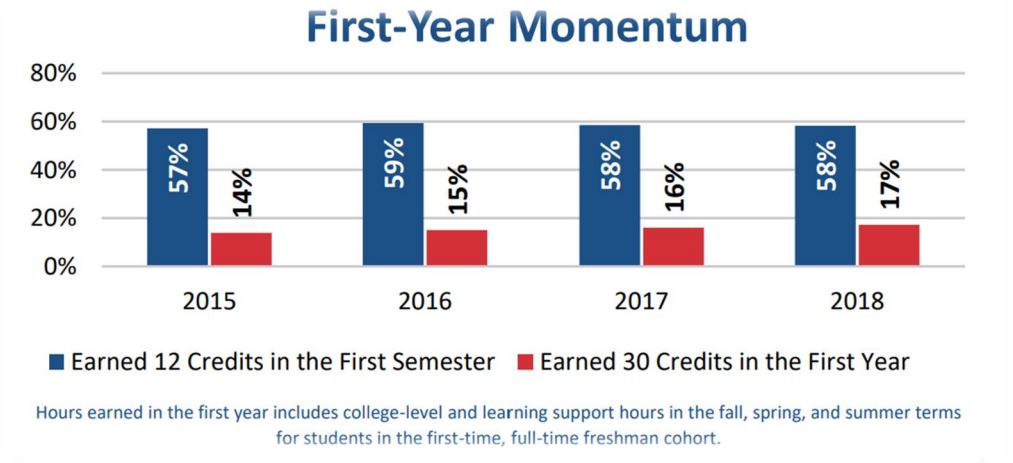
https://www.achievingthedream.org/blog/18050/in-online-learning-webinar-series-atd-teaching-learning-team-stresses-equitable-approaches

DATA

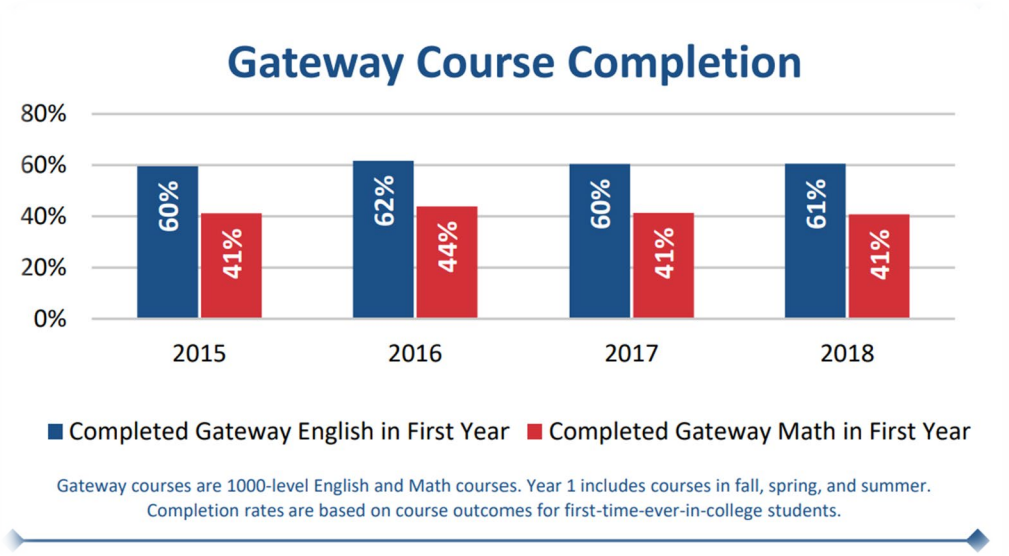
So, what does the data tell us about community college higher education in its pre-COVID context, especially for The College System of Tennessee, which is governed by the Tennessee Board of Regents?



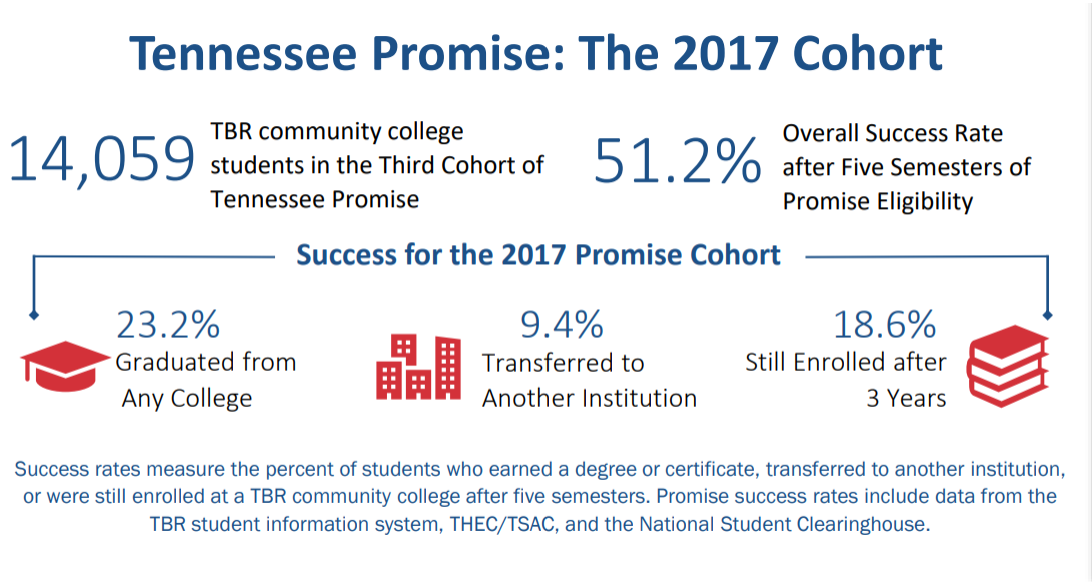
Although retention of first-time, full-time students is slightly above 50%, the 3-year graduation rate is only 25.3%, meaning only 1 in 4 community college students graduate within 6 semesters of their enrollment into community college.



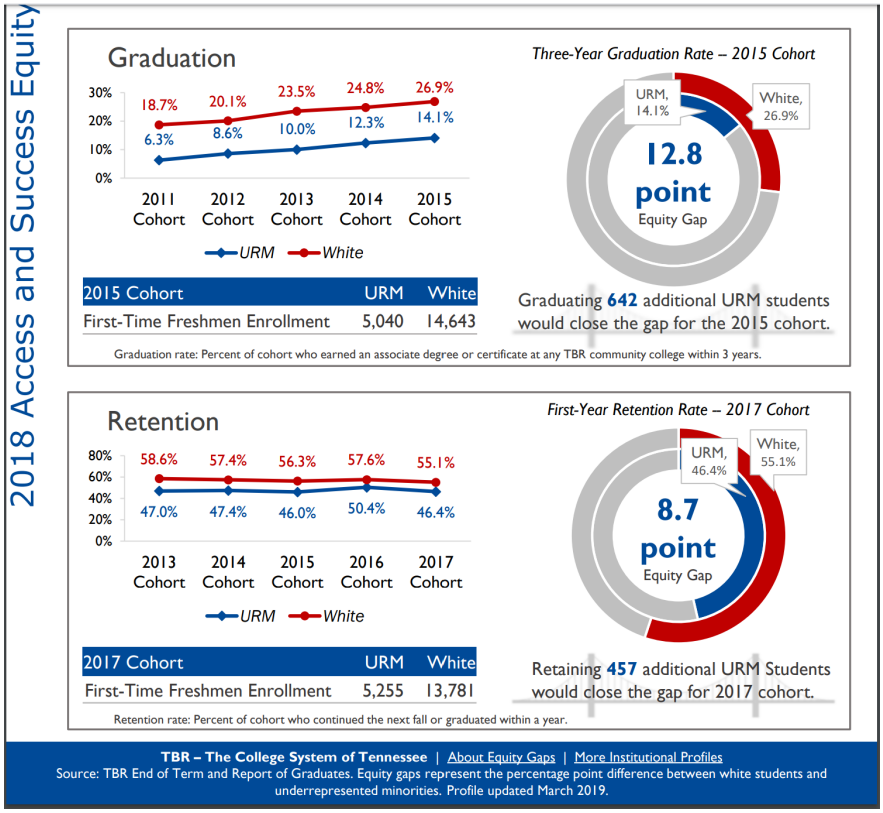
Additionally, although first-year momentum metrics for earning of 12 credits hours in the first semester and 30 credit hours in the first year, are basically unchanged for the last two years, gateway course completion has decreased by 3 percentage points over the past 3 years, suggesting a change in how the academic calendar functions for students is needed and could possibly serve to increase these metrics.



Gateway course completion for English and Math in year one, includes fall, spring, and summer semesters, shows a flat trend, and so a rethinking of this calendar, is a must. Certainly, at the very least, a shift to a non-traditional calendar which is more response to various student populations could positively impact these student outcomes if implemented with the students in mind from an equity lens.



Certainly, with the investment that the State of Tennessee is making in our traditional learners, ages 18-24, it would seem that the removal of financial barriers for this population, in particular, would yield a better student success rate than less than 20%. Thus, our Drive to 55 goals for the entire state warrant a rethinking of our traditional calendar and how we supply higher education to an ever-changing student demographic throughout the state, especially in a COVID-19 world whereby online learning and hybrid learning are likely to be the new normal.



The issue of equity also makes a compelling reason for the reconsideration of our traditional academic calendar. The data above suggest that the traditional calendar and the ways in which courses are administered in the community college space is not working for all students, especially African-American students. The equity gaps are startling and concerning and requires The Community College System of Tennessee to reconsider how the teaching and learning process is administered across the 13 community colleges within the state. The 12.8 percentage point equity gap in graduation and the 8.7 percentage point equity gap in retention compel us to rethink our approach to course modality, design, and timing.

WHAT IF….?

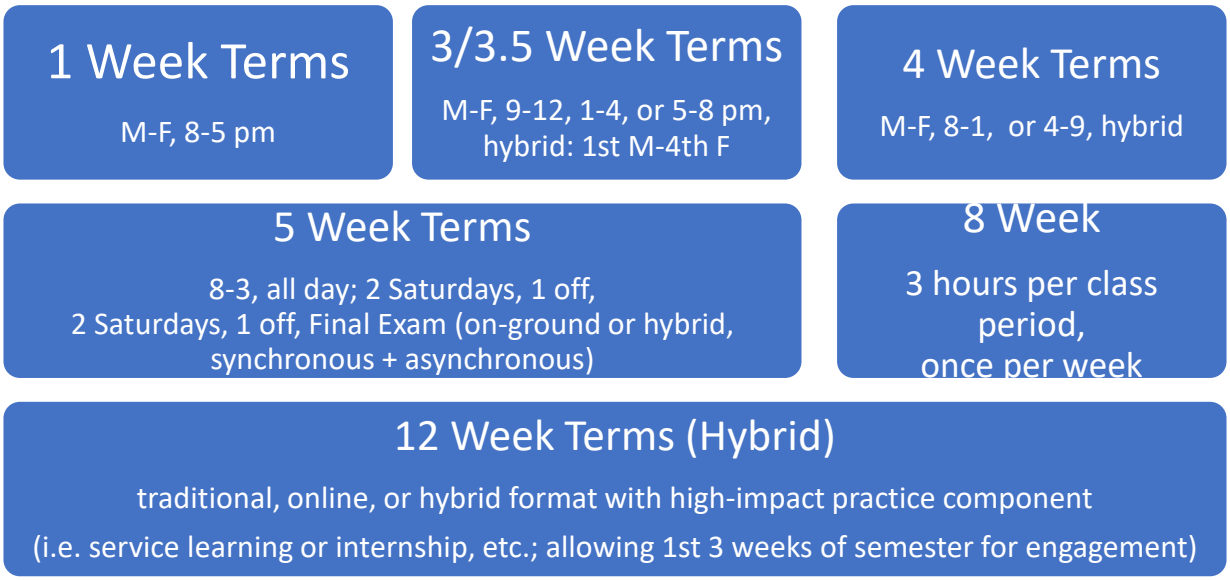
So, what if we abandoned the traditional academic calendar for a more innovative calendar and approach to the teaching and learning process in our Community Colleges?

Consider the following options for term schedules. In the *Chronicle of Higher Education*, Jeffrey Selingo, former editor of *The Chronicle*, published in 2018 the types of learners now being encountered in today's colleges. He indicates that all learners are looking for flexible pathways to a degree. Selingo shares that there are five (5) types of learners as follows:

- Traditional Learner: desires on-ground learning for social interaction and the ultimate goal of finding a good job;
- Hobby learner: desires to participate in the journey of learning;

- Career Learner: desires to secure a good job as his/her main focus;
- Reluctant Learner: described as an average learner with little passion; and
- Skeptical Learner: average or below average learner.

However, the last two descriptions are, in my opinion, steeped in implicit bias, so for the purpose of this white paper, the focus will remain on the first three types of learners.



1 WEEK TERMS:

The issue of equity also offers a compelling vision for the reconsideration of our traditional academic calendar. One week terms would appeal greatly to the Hobby Learner and Career Learner, in that an individual could set aside one full-week week to learn in the higher education setting and possibly advance his or her career by preparing for certification or knowledge for intrinsic values, offering more compelling and humanistic reasons. Such terms are conducive for employer tuition assistance and employer-sponsored professional development opportunities.

3/3.5 WEEK AND 4 WEEK TERMS

Three-week and 3.5 week terms as well as 4-week terms offer acceleration and flexibility for traditional learners, hobby learners, and career learners seeking to engage with others in intentional ways, prepare for the job market, and enjoy the journey of learning. Such terms allow for strong employer-educational partnerships that would empower the community college to truly serve the community in significant ways.

5 WEEK TERMS

Five-week terms allow traditional aged and non-traditional aged students to enroll full-time while concentrating on only 2 courses at a time. These courses could be offered in back-to-back 5-week terms or over several Weekends/Saturdays with a break in between. Students

could take classes over 2 Saturdays, take off one Saturday, attend two Saturdays, take off one Saturday prior to Finals, and then return for the final Saturday for final exams. This scheduling gives students one week to prepare for the course assignments, and this format lends itself to on-ground, online, or hybrid models.

8 WEEK TERMS

To increase early momentum metrics as well as increase gateway course completion in the first year, eight-week terms are ideal for students to take their development course the first 8-weeks and their college-level the 2nd 8 weeks of the semester. Students would be full-time and potentially be able to take an exploration course over the course of the full semester as they are increasing their foundational skills towards degree completion. Removal of the challenges of managing four-to-five classes at one time would be a compelling way to help advisors, student success coaches, and faculty better support students towards course enrollment and completion, while also allowing more time for wrap-around supports as interventions to improve student success outcomes.

12 WEEK TERMS

For urban community colleges, the challenges of poverty are real, so offering 12 week terms, especially for first-generation students, would allow for college enrollment that could provide non-credit bridge programs for the first 3-weeks of a full semester, and then all students to enter into their college-level courses with more confidence. Also, 12-week terms also allow for excellent opportunities in the summer (late May, June, and July, early August) to offer Summer Bridge programs that offer both co-requisite courses and college-level courses in partnership with low-performing high schools to increase the K-12 pipeline, while also increasing enrollment and student success outcomes in retention and completion for specific, promising student populations. Additionally, 12-week terms allow for hybrid formats, high-impact practices infusion, and culturally responsive course design.

A MODEL

Block scheduling at Colorado College is a national model of a college seeking to connect students, faculty, and staff to the community. Courses start on the first Monday and end on the 4th Wednesday as identified on the Colorado College web site. Once block is equivalent to 1 class. Below are outlined the Block Basics:

- “A block lasts for three and a half weeks, beginning on a Monday and ending on the following fourth Wednesday.
- One block is equal to one class on the semester plan.
- Four blocks per semester; eight blocks per year, plus optional Half Block in the winter and Summer Session during the summer.
- Class typically meets 9 a.m. - 12 p.m., Monday through Friday, with applicable labs in the afternoon, but professors are free to schedule classes in the format they feel is most suited to the subject matter.”

- https://www.coloradocollege.edu/basics/blockplan/

Colorado College has assessed its unique location in the nation and its opportunity for adventure learning and community engagement. Thus, it is highly recommended that each Community College in The Community College System of Tennessee assess its unique position within the community it serves in order to cultivate an academic calendar that is more responsive to the needs of the students, faculty, staff, employers, and communities they serve.

In a recent Chronicle of Higher Education article entitled "The Next Casualty of the Coronavirus Crisis May Be the Academic Calendar" by Beth McMurtrie dated April 16, 2020, she posits that, in the wake of the COVID-19 pandemic, colleges should, perhaps "split their semester into smaller parts," in order to create hybrid learning models that are flexible and responsive in light of the risk factors associated with the traditional learning environment during this uncertain time.

I suggest that such considerations should be made in light of not only the pandemic, but also in light of the fact that student demographics are changing quickly with very little increase in positive student outcomes across the higher education landscape.

Georgia State University, a model public institution of higher learning, also utilizes the block scheduling model and has greatly increased student outcomes as a result, while closing equity gaps by race, yielding virtually no remaining equity gaps for underserved populations.

FINAL CONSIDERATIONS

Of course, anytime such drastic changes are suggested, there will be feelings of fear and uncertainty. Certainly, faculty will be hesitant of letting go of the comfortable 15- or 16-week semester models they for which they are accustomed.

Additionally, students may be fearful of taking classes under an accelerated model, which requires faster engagement and retention of course content. Additionally, where poverty is an issue, especially in urban and rural areas, the challenges of students acquiring their textbooks in a timely fashion could negatively impact teaching and learning. Virginia Community College, according to McMurtrie, is already expanding its implementation of Open Educational Resources (OER) to combat this issue. Community Colleges in Tennessee will do well to follow their lead at scale. https://www.chronicle.com/article/Are-Colleges-Ready-for-a/248710
SACSCOC also requires that a certain number of instructional hours are required for a 3-credit hour course that must be intentionally met to ensure time on task in the teaching-learning process. Ensuring that quality does not suffer is imperative to the success of such an innovative model for classroom instruction.

This model requires a rethinking of faculty contracts, especially as it relates to abandoning of the traditional 9-month model. How faculty will be compensated as a result of redesigning courses for an accelerated and hybrid model must also be addressed.
Finally, moving away from the traditional calendar will require a strategic communication plan for students, parents, employers, and the community as a whole that fully embraces student success and workforce development as the mission of the community college.

Colorado College posits the following: "Because it naturally supports a more active, collaborative form of learning, it has stood the test of time — and fits in extremely well with the learning style of today's generation of engaged and independent students. By committing to the Block Plan, our faculty have chosen a different and, yes, somewhat more arduous path. The intensity of the Block Plan requires innovative pedagogy and daily, mutual accountability between faculty and students."

And although Colorado College is not a traditional community college, but rather a 4-year liberal arts college, there is much to learn from their innovative academic calendar that places students and community needs at the forefront, while offering students the opportunity to engage with their learning inside and outside the classroom in a culturally responsive context, acknowledging the unique time and place of that learning.

McMurtrie states that strategic planning for the fall will "require some serious rethinking of the undergraduate educational experience, with online learning playing a prominent role. The virus has already prompted some colleges to reimagine the traditional calendar."
To support McMurtrie's stance, ATD President, Dr. Karen Stout adds: "when it comes to adaptability, community colleges are often ahead of the curve. Accustomed to teaching a variety of students with different interests and needs, they have been early adopters of flexible scheduling,...many...member colleges have been moving toward eight-week terms, a trend that the coronavirus is likely to accelerate, she says. https://www.chronicle.com/article/Are-Colleges-Ready-for-a/248710

So, what if we abandon the traditional academic calendar? Based on the current state of our nation and the needs of students and communities to be transformed, I contend that we should move beyond the "what if" to "how to," and just do it. Our students deserve our best thinking in this time of crisis and injustice. Equity demands it.

With over 25 years of administration and teaching experience in higher education, Dr. Taylor currently serves as Associate Vice President of Retention & Student Success at Southwest Tennessee Community College. Her areas of responsibility include Professional Academic Advising, Veterans Affairs, Academic Support, Career Services, Student Development, Counseling, Social Services, Student Disability Services, Testing Services, and Grant Writing/Development/Management to support student success. Dr. Taylor earned the Doctor of Education in Educational Leadership with an emphasis in Higher Education Administration from Union University, Jackson, TN. As AVP and member of the President's Cabinet and Student Success Council, Dr. Taylor embraces the responsibility to effectively lead the Retention and Student Success and Equity & Inclusion strategic initiatives of the College, which are designed to close academic achievement gaps for a very diverse and promising student population at Southwest. She has presented nationally at the Achieving the Dream (ATD) Conference and National Kickoff for new ATD colleges and her research interests focus on holistic college student success, retention, career and calling, and sense of belonging/purpose. Dr. Taylor is truly passionate about leveling the playing field for and transforming the lives of students and genuinely welcomes every opportunity to do so.

The Impact of Artificial Intelligence on Higher Education

Dannelle F. W. Whiteside, Austin Peay State University

Introduction

The first programmable robot was built in 1954 as a 4000-pound robotic arm on the General Motors assembly line. Fast forward 66 years, artificial intelligence is a 10-billion-dollar industry and is expected to become a 126-billion-dollar industry by 2025. Artificial intelligence impacts nearly every facet of human life and has its reach in nearly every industry, including higher education. Suffice it to say, artificial intelligence is here to stay.

Artificial intelligence (also referred to as "AI") in higher education will become increasingly more effective over time as computers and systems become more capable of solving complex problems. In addition, industries will come to rely on higher education to prepare students for the work world which will be heavily impacted by artificial intelligence. Enterprise leaders can harness the power of artificial intelligence for three main purposes. First, artificial intelligence is prime for use in improving student recruitment and engagement. Second, artificial intelligence can be used to increase efficacy of an institutions' business practices. Finally, enterprise leaders can utilize artificial intelligence to partner with industry leaders in preparing students for the highly technologized industries they will enter.

Problem Statement

Artificial intelligence is defined as the theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages. But what does AI have to do with higher education? The biggest expense in higher education is labor costs. According to the most recent IPEDS data, faculty salaries account for an average of between one third and one fourth of most higher education institutions' budgets. When you add admissions and other support staff, those numbers increase even more. Additionally, those functions are also limited in time, being that there are finite hours in the workday. Consequently, artificial intelligence is prime for taking over more of the rote and mundane tasks to free faculty and staff to perform the more complex functions of their work and expands the time in which those more mundane tasks can be performed. Thus, artificial intelligence increases the opportunities for higher education services to become scalable both inside and outside the classroom at the rapid pace of innovation.

Ultimately, the impact of artificial intelligence on higher education is inevitable. It would be incumbent upon higher education leaders to embrace this impact and be at the forefront of shaping how it will be utilized rather than being reactive and allowing the impact to be imposed.

Suggested Solutions

Artificial Intelligence's Impact on Student Recruitment and Engagement

Higher education leaders should utilize artificial intelligence as a tool for targeted student recruitment, learning enhancement, and student engagement. When it comes to student recruitment, artificial intelligence is currently being utilized to provide personalized assistance to students in all phases of the enrollment process. The benefit of utilizing artificial intelligence is that it is not limited to the 8-hour workday. Students have access to these tools 24 hours a day, 7 days a week. Higher education leaders should be looking to employ artificial intelligence as a front-line tool for targeted recruitment strategies. For example, chatbots are popular features that institutions can utilize on their websites to provide 24/7 question and answer sessions for prospective students. AdmitHub, is one such example. Their chatbot feature allows prospective students to text the chatbot to receive answers to basic questions, which helps to free admissions counselors to answer more complex questions. Georgia State University (GSU) partnered with AdmitHub in 2016 to create Pounce, which is a chatbot for enrolled students at GSU.[1] Students were able to pose basic questions to the chatbot, which helped them to move successfully along the registration continuum. As a result, GSU reported a 3.9 percent increase in enrollment and a 21.4 percent decrease in summer melt.

Artificial intelligence should also be used as a tool for learning enhancement and student engagement. Learning and instruction continue to improve via technological innovations for the benefit of faculty and staff. AI-enhanced content creates more engaging, rigorous and adaptive approaches to the classroom experience. Artificial intelligence is beginning to improve a student's learning experience by individually tailoring lesson material designed to identify and correct student misconceptions. In addition, grader-bots have been programmed to assist within an online course's discussion board to maintain the community on a 24-hour, 7 day a week basis, which aids faculty in their work.

One example of this tailored approach is ECoach, which was developed at the University of Michigan.[2] ECoach is a digital platform utilized by students in large-scale introductory science, technology, engineering and math (STEM) courses. The platform focuses on formative feedback and tracks students as they progress through lessons, guides them away from common mistakes and identifies potential areas of interest. Another example of the way in which artificial intelligence can enhance the classroom experience is ShadowHealth. This AI platform is a digital clinical experience that simulates patient cases for nursing students who would normally have to schedule time with live actors to practice the skills they need. ShadowHealth proved to be a valuable tool for students at Liberty University who used the platform for their clinical

[1] https://www.admithub.com/blog/admithub-launches-first-college-chatbot-with-georgia-state/

[2] https://ai.umich.edu/blog/infographic-growth-and-adoption-of-ecoach-across-the-university-of-michigan/

experiences during the COVID-19 crisis when students were unable to safely enter hospital settings.[3]

Artificial Intelligence's Impact on Business Practices

Artificial intelligence can also help higher education leaders to streamline business practices. In comparison to humans, artificial intelligence is able to quickly solve complex calculations, perceive patterns, and make agile data-driven decisions. Because of this, artificial intelligence can be a useful tool for managers looking for some quantitative support in their decision-making. Especially in university business offices, higher education leaders should analyze business practices to take full advantage of richer, faster data that artificial intelligence can provide. This is especially true for those tasks primarily involving gathering, triaging, compiling and reporting data to identify risks, issues and status updates.

In addition, managers within higher education may find that artificial intelligence can help them manage day-to-day administrative functions that do not require specialized skills and expertise. For example, a Harvard Business Review survey of project managers found that 54% of their time was used performing administrative functions. Utilizing artificial intelligence to perform routine management tasks gives managers more time to focus on value-added activities. For example, artificial intelligence tools like X.ai can alert managers when risks or roadblocks arise that require a meeting to address. [4] It can even set up the meeting, invite the appropriate participants, prepare the meeting agenda and follow up on action items. This frees up the manager to perform the essential function of problem-solving.

Artificial Intelligence's Impact on Curriculum

Higher education leaders should leverage partnerships with industry leaders to expose students to artificial intelligence innovation. An example of such partnership is the C3.ai Digital Transformation Institute, which is a consortium of several universities and technology companies to advance the benefits of artificial intelligence in business, government, and society.[5] By engaging in such partnerships, students, serving as research assistants to the faculty in the consortium, can gain tangible experience that will be transferrable for their future careers.

In addition to partnerships, industry experts will increasingly rely on higher education to prepare their impending workforce for artificial intelligence integration. Beyond the evolving occupations or skills needed, many jobs across industries will be impacted by the growth of automation and artificial intelligence. Opportunities exist for higher education to provide their

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[3] https://mc.ai/the-pandemic-cant-keep-nursing-students-from-clinical-practice-experience/

[4] https://www.askspoke.com/blog/support/how-ai-is-transforming-workplace/

[5] https://news.uchicago.edu/story/uchicago-joins-new-academicindustry-consortium-accelerate-ai-innovation

students with exposure to AI in every discipline. Research shows that, currently, only a small percentage of jobs are fully automatable or, conversely, completely robot-proof.[6] This indicates that as artificial intelligence progresses, chances are that parts of all jobs will be affected by automation. Higher education curriculum and instruction should reflect this shift in order to prepare graduates for the work environments they will enter.

Recommended Implementation

The first step in embracing the impact of artificial intelligence is to utilize AI to streamline business processes. This is low-hanging fruit when it comes to introducing artificial intelligence into the higher education industry. Universities should determine which tasks would be most ripe for automation and search for an AI solution that will meet that need. In particular, as institutions are bracing themselves for the financial impact of COVID-19, many institutions will find themselves looking for ways to meet budget shortfalls, including by implementing hiring freezes. Determining now how artificial intelligence might assist in automating tasks may provide a buffer in times where it is not possible to onboard new employees.

The second step is to implement artificial intelligence to enhance the student experience. There are ever-evolving AI tools to enhance recruitment practices and the student experience. Higher education leaders should evaluate and invest in the tools which are most effective and will most meet the needs of the institution.

The final recommended step is to partner with industry leaders for job preparedness. The instruction that is currently happening in today's university classrooms is designed to prepare students for the jobs in existence in the future. Because of this, higher education leaders should be partnering with industries to provide training for all students. This should obviously include preparing computer scientists to engineer artificial intelligence platforms. But it should also extend to preparing all students to adapt to an environment where AI is utilized as an everyday tool in the workplace.

Conclusion

The world of artificial intelligence and its impact on our future is exciting. We have not even scratched the surface on the extent to which AI will pervade every industry, including higher education. Many times, the capabilities of the artificially intelligent platform will exceed what the industry is using it for. Because of this, it is going to require an institutional commitment and entrepreneurial spirit to adopting AI in higher education in order to truly realize its impact. There also may be some resistance to "replacing humans with robots," especially in an industry that is very in-person-interaction centered. However, leaders should be careful to explain that the

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[6] https://s3.amazonaws.com/nashvillechamber.com/2019VitalSigns_Final.pdf https://www.nashvillechamber.com/blog/2019/is-your-job-robot-proof-find-out-which-nashville-industries-are-most-at-risk-for-automation

primary purpose of artificial intelligence is not to replace humans, but to increase institutional efficacy and functionality so that employees have the freedom and flexibility to perform the more inspiring aspects of their work.

Dannelle Walker Whiteside currently serves as Interim President and formerly Vice President for Legal Affairs for Austin Peay State University in Clarksville, TN where she led the APSU Office of Legal Affairs and served as secretary for the University's Board of Trustees. She has worked extensively in the areas of education law and policy and has dedicated her career to promoting equal access to education.

Ms. Whiteside previously served as General Attorney for the U.S. Department of Education, Office for Civil Rights, in Philadelphia, PA where she reviewed, evaluated, and resolved complex and sensitive cases ranging from sexual violence to disability discrimination, in both the elementary and postsecondary contexts. She has also previously served as General Counsel for the Tennessee State Board of Education and District Policy Advisor for Metropolitan Nashville Public Schools.

Ms. Whiteside has previously been named one of the Nation's Best Advocates: 40 Lawyers Under 40 by the National Bar Association and won the Nashville Emerging Leader Award in Education given by the Nashville Area Chamber of Commerce and YP Nashville.

Ms. Whiteside loves spending her free time with her husband Sean and their new baby boy, Donovan.

Retrospective

Robert M. Smith, Co-Director, Tennessee Higher Education Innovation and Leadership Fellows

Congratulations to the 2020 Tennessee Higher Education Innovation and Leadership Fellows inaugural class.

When the class started their first session in October 2019 at Austin Peay State University, I remarked, intending to be humorous, this would be the class to show 20-20 vision for our future. Little did any of us know that 2020 would be of such global historical significance. With the pandemic of COVID-19 already killing a half-million people world-wide and closing in on 150,000 Americans as well as triggering an economic crisis not seen since the Great Depression, higher education was caught in reacting to "unprecedented and urgent" change.[1]

In a matter of weeks, the Tennessee public higher education transformed from traditional in-person and onsite classrooms and laboratories to entirely online, a change that would have taken months or years if not for the unprecedented and urgent need to change. For some of our class (e.g. technical colleges), such a change was extraordinary. In addition, almost every operation adapted as a result of a genuine fear of the spread of this invisible and unpredictable virus. We moved quickly to accommodate stay-at-home orders, social distancing requirements, and healthy safety practices that were unprecedented and urgent.

As if COVID-19 was not enough to confront the class, the May 25th murder of George Floyd by a Minneapolis police officer ignited instant condemnation and weeks of intense protests about systemic racism and police brutality engaging millions of Americans as well citizens from around the world. Additional protests as well as riots continued as similar cases of police misconduct and outright racism were brought to light. What some had known for ages if not generations were now becoming beacons for justice to a larger audience. When it takes NASCAR[2] to bring light to the Lost Cause of the Confederacy,[3] we recognize a gapping void in understanding our own history. Again, our Tennessee public higher education institutions were pressed to address conditions that had remained generally absent from our agenda. However, this was (we hope) clearly different. Unprecedented and urgent change was needed, and the demands for substantive change were squarely in our face.

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[1] This was written July 4, 2020. I think we will find the word "unprecedented" to be the most overused word for 2020 not without basis.

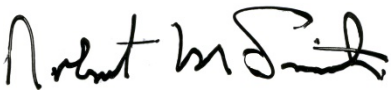
[2] https://www.nascar.com/news-media/2020/06/10/nascar-statement-on-confederate-flag/

[3] See: https://en.wikipedia.org/wiki/Lost_Cause_of_the_Confederacy

Our Class of 2020 are remarkably dedicated professionals who spent our year together preparing to address the challenges that have made 2020 a significant milestone not only for higher education's transformation but a global transformation. If we believe Nelson Mandela's statement that, "Education is the most powerful weapon which you can use to change the world," then we have an obligation to improve Tennessee public higher education in ways that not only benefit those who enter our doors but improve our society in general.

This collection of original articles provides inspiration for change within the higher education enterprise. We hope our readers will find within the range of topics thoughtful ideas for the necessary transformation for Tennessee public higher education.

I am inspired by this class. They will be a group I will always remember for their resilience as well as compassion for each other. Their ability to adapt to the challenges over the past five months of our journey is evidence enough of their enterprise leadership skills as well as innovative mindsets. I appreciated their dedication to the program and found their determination and sense of purpose to their role as leaders of Tennessee public higher education inspirational. I congratulate them and wish them well as they continue to pursue their leadership expedition.



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