President’s Message: WSU’s role in the changing environment of higher education

Higher education is in a time of change not experienced since the second half of the 19th century and the first decades of the 20th. Following passage of the Morrill Act during the Civil War and the explosion of new inventions during the late 19th century industrialization, higher education was metamorphosed.

The number of universities expanded dramatically; new disciplines, professions and colleges were added at prodigious rates; and Cardinal Newman’s idea that education was its own reward and his often-misunderstood notions of a “liberal education” were spreading widely in Europe and the United States.

This also was the era in which there was widespread adoption of specialized faculties housed in departments; research became the partner of teaching; and the inclusion of vocational subjects became common in universities.

Kansas State University was founded in 1863; the University of Kansas in 1865; and Wichita State in 1895. These three major research universities have figured prominently in the state’s development and are individually and collectively important drivers of its future.

The basic structure of the modern university as we know it primarily developed in the 20-year period between 1890 and 1910. So, the basic structure and functions of the traditional American university is primarily a product of the Industrial Revolution. To be sure, it has deep roots back to the University of Bologna and the University of Paris, but the modern university is an invention of the industrialization.

This long-serving but increasingly outdated idea of a university reflects in its curricula and structure both the massive growth of knowledge and the equally massive growth and complexity of the economy coupled with enormous social change. The modern university is an invention that is socially, politically and economically situated within its historical context.
A part of this context that is often not discussed is that higher education as it evolved was for the few and not the many. Women had difficulty being admitted to some universities and the percentage of the population with four-year college degrees was very small. By 1940, only 6 percent of men and 4 percent of women held four-year degrees and most Americans over age 25 had an eighth-grade education or less.

In the South, higher education was segregated with African-Americans being excluded from enrolling in white institutions, and even in the North, it was not unusual for universities to have racial or religious quotas. But, universities continued to evolve both because of the social, economic, and political forces of society and because of major court decisions that outlawed many discriminatory practices. According to the National Center for Educational Statistics:

The 20th century has been a period of dynamic growth for higher education institutions. Colleges have evolved from institutions largely limited to the social elite to much more egalitarian institutions attended today by nearly two out of three high school graduates.

During the later years of the 20th century, higher education continued to evolve, grow and change, but its basic industrial structure remained intact. Higher education managed most changes through incremental small alterations that did not upset its industrially derived order. But, over time, the pressures to change have mounted and the situation within which traditional higher education is operating is very different.

We are facing the classic “innovator’s dilemma,” defined by Clayton Christensen is his 1997 book that describes how new competitors, often through use of market segmentation strategies, pricing and technology, gain market share and eventually disrupt and topple established industry leaders. Christensen noted in a 2016 interview in Forbes that competition is most likely to disrupt an industry where the consumers of that industry are dissatisfied with the product or outcome.

This sounds a great deal like higher education as it exists today. Employers are not on average satisfied with graduates; and in a recent survey of American adults, only one in four felt that higher education was functioning well. And, as clearly articulated by the Lumina Foundation, there are increasing calls for a major redesign of higher education:

Indeed, fundamental redesign is a must — because the traditional higher-ed model is simply insufficient to our needs as a society. That’s not a criticism of any institution, individual or mindset. The fact is, the current system lacks the capacity and the flexibility to properly serve the millions of additional students who must be served if we are to meet the nation’s attainment goals.

So, the national scene for higher education is at best choppy and there are gathering winds that will force change. How higher education responds to this environment will in large measure determine its future. As with many industry leaders of the past, we can continue to offer our traditional services to our core market and hope that their current level of dissatisfaction
dissipates, or we can maintain the status quo and delay responding until we are required to change by external forces beyond our control.

The stay-the-course strategy, while emotionally satisfying in the short-run, is dangerous in the current and likely future environment of higher education. The hold-out-as-long-as-we-can strategy buys enough time for some of us to complete our careers, but it doesn’t bode well for the future of WSU.

I believe the best approach, the one we are pursuing, is to protect the core teaching-research-service mission of higher education while vigorously identifying and addressing the needs of our students, community, state and economy.

I’ve been thinking about these issues as I work with colleagues throughout the university and Kansas Board of Regents to determine our best responses to the changing environment for higher education, especially as it applies to WSU as an urban-located, public research university with high ideals and aspirations.

The Regents Foresight 2020 The KBOR strategic plan has core goals that define the framework within which all regents’ institutions must operate.

**Goal 1:** Increase Higher Education Attainment Among Kansans  
**Goal 2:** Improve Alignment of the State's Higher Education System with the Needs of the Economy  
**Goal 3:** Ensure State University Excellence

It’s in the context of those goals that WSU is moving forward.

Our most effective response mechanisms over the past five years have included the development and implementation of:

- The Strategic Plan Vision, Mission, Values and Goals.
- Innovation Campus.
- Strategic Enrollment Management, including One Stop and the 1-35 Corridor Recruitment Strategy.
- Affiliation with Wichita Area Technical College to create the coming Campus of Applied Sciences and Technology.
- Office of Diversity and Community Engagement.

While I work through my own thoughts on next steps in a lengthy research paper, I’d invite your reactions to three broad initiatives I believe we need to pursue to help further reshape the
university in the coming years to meet KBOR’s and the university’s goals. I have been discussing each of these with on-campus constituencies and the Regents:

1. **Micro-credentials and certificates**
   Students and employers demand both faster knowledge acquisition and more specialized just-in-time training than what traditional degrees and certificates offer. In response, colleges and universities are adopting micro-credentials as a way to “signal competencies, skills and connected networks through a growing system of emphasizing evidence-rich credentials.” Within this framework, students demonstrate competencies through a variety of means: electronic portfolios that they share with potential employers, digital badges that they display on social media sites like Facebook or LinkedIn, or by indicating completion of certifications, or “mini” or “nano” degrees on their resumes and CVs.

2. **Expansion of new applied learning models**
   Although Wichita State University has made applied learning experiences available to students for decades, the concept gained substantially more importance when the institution’s strategic plan vision of applied learning and research was approved both on campus and by KBOR. The single most important defining characteristic of the institutional strategy is the centrality of applied learning.

   I see applied learning being redefined and reconceived in new ways around the traditional vocabulary of apprenticeships and co-op. Over the next two years, WSU will work to reorganize and strengthen its ability to offer both apprenticeships and co-op programs. While it is well understood that these are only two types of applied learning, they are increasingly important and can become both a point of distinction for student recruitment and a means to enhance the economic capacity of central Kansas.

3. **Student retention to graduation**
   We all know that retention is best at selective universities drawing academically prepared students from highly educated families. But that’s not our situation.

   What has been missing at WSU is a strategic approach to retention; that approach is being developed and will result in a strategic retention plan. To be effective, such a plan needs to be:

   - **Holistic.** It needs to address students’ educational backgrounds as well as their social and self-efficacy needs. This means that it needs to be institutional and not focused only on one division.

   - **Granular.** There is no “one size fits all” approach to retention so the plan has to focus on the needs of sub-groups of students.

   - **Systematic** and organized. It must be implemented across the institution and be a high priority for people of all divisions who might contact students formally or informally.
• **Assessed.** Simply “doing things” is not effective. There must be a strong plan for assessment that is rigorously applied to determine the effectiveness and efficiency of outcomes of retention interventions.

• **Iterative.** As with all new approaches to enhancing the student experience, initial efforts will not be perfect and implementers have to take a “continuous improvement” approach to retention programming. Some initiatives will work well the first time, others will need to be “tweaked,” and some may need to be totally redesigned. In a continuous improvement model, all of these are legitimate outcomes since the real goal of the program is to enhance the student’s experience in such a way that that student graduates.

In conclusion, we have significant work ahead. If we do it well, good results will follow. I encourage you to merge these preliminary thoughts with your own best ideas and let me know how you think we can keep producing better results for our student, community and state. I appreciate all you do to move the university forward. Write to me, president@wichita.edu.
Jessica Provines experienced quite the change when she returned to WSU from maternity leave this summer. After three months at home with her newborn daughter, Cleo, Provines came back as director of the Counseling and Testing Center, taking over for Maureen Dasey-Morales, who had been named associate vice president for Student Affairs.

Provines describes that period of time as “discombobulating” as she got used to being back at work in a new, more pressure-filled job. But it was a position she was well prepared for after 10 years at the center, most recently as associate director.

“I’m adjusting – settling in and enjoying my new role,” Provines says.

Along with test-taking services, the Counseling and Testing Center helps members of the WSU community who are experiencing difficulties. Services include individual, couples or group and family therapy.
A few months in, she’s looking toward the center’s future, which includes partial restructuring of some key positions and making progress toward her longtime goal of developing a peer educator program aimed at social sciences students.

She has also helped lead the way in securing a federal Substance Abuse and Mental Health Services Administration Garrett Lee Smith suicide prevention grant, which has brought increased suicide prevention awareness to campus.

In addition to leadership responsibilities, Provines provides counseling services for up to 10 students a week.

She began at Wichita State in 1998, when she transferred her sophomore year from the University of Kansas to pursue her degree in psychology with a minor in sociology.

She earned her master’s in the Community Clinical Psychology Program and her doctorate in community clinical psychology.

Fun fact: Jessica and her husband used to perform at area parties. She sang while he accompanied her with the guitar.

As a student, Provines was involved in campus life and with her sorority, Gamma Phi Beta. Her senior year, she co-directed the winning 1940s-themed Hippodrome skit -- in which she won the best actress award -- alongside her future husband, Brandon, a 2002 integrated marketing and communication alumnus.

Provines was also involved in undergraduate and graduate research, gaining valuable experience from faculty including Dasey-Morales, Darwin Dorr and the late James Snyder.

After earning her doctorate, she worked for a year at Prairie View as an outpatient therapist, but returned to WSU when a staff psychologist position opened up in the Counseling and Testing Center. She’s been here ever since.

“I feel like coming to Wichita State as a student was one of the best things that happened to me,” she says.

As most parents know, there isn’t a lot of free time with small children, and Provines is no exception. Along with Cleo, who is now 6 months old, Provines and Brandon have Ruby, 4, and Opal, 3.

They spend a lot of time with their extended family, as well, which includes 12 nieces and nephews.
The Division of Diversity and Community Engagement staff continue to identify new partnerships and explore opportunities to expand the reach and influence of the university.

As a university, we are making tremendous progress and appreciate the input received from faculty, staff and students throughout the process.

In this new division, we strive to achieve excellence, and I would like to take this opportunity to congratulate our staff on the following successes:

- President’s Diversity Council marketing and communication committee for hosting the second annual DiverseCity week in partnership with CutH8 Wichita State. The week full of activities were a success.
• Riccardo Harris, executive director of Wichita State GEAR UP, for his efforts related to the two new seven-year GEAR UP Partnership awards that have been funded through the Department of Education. (Above photo, taken at the announcement.)

• The Public Policy and Management Center in collaboration with the Office of Community Engagement and Opportunity released the Shocker Neighborhood Project survey results that identify community priorities for further exploration. This survey was a tremendous success, reaching almost 400 residents.

• The upcoming rededication of Grace Wilkie Hall in honor of Grace Wilkie, who became Fairmount College's dean of women in 1921 and continued in that capacity through the college’s transition to the Municipal University of Wichita. She retired in 1953. The rededication will include a ceremony and open house from 2:30-4:30 p.m. Wednesday, Nov. 8.

• Also on Nov. 8, we will honor our veterans with a flag rededication. There will be additional details available through Strategic Communications, and we look forward to sharing these experiences with you.

— Dr. Marchè Fleming-Randle
Vice President for Diversity and Community Engagement
Fairmount Technologies, located on the Wichita State University campus, received a new contract with the Department of Defense to further develop its portfolio of manufacturing technologies for discrete part manufacturing.

The $1 million contract is for building a prototype for the machining concept that was proven through a successful phase I Small Business Innovation Research contract to improve machining of long, complex-shaped parts used in aircraft manufacturing.

It's a machining project that uses advanced sensing technologies to correct the machining path of the tool in real-time. The goal is to reduce loss of materials due to machining failure, set-up cost and lead time for manufacturing multiple parts or one-off spares.
“The pool of excellent employees who are current or former WSU students is a valuable asset to Fairmount Technologies.”

Fairmount Technologies was founded in 2008 by Vis Madhavan, professor of industrial and manufacturing engineering at WSU, and is located in Beggs Hall.

Madhavan is one of the inventors of the Stretch Roll Forming process, a manufacturing innovation with the potential to revolutionize the process of bending extrusions into components.

This process allows parts to be produced rapidly using computer numerical control programs instead of part specific dies, at lower production and environmental cost, with improved quality and increased accuracy.

Mahdi Kashani, general manager at Fairmount Technologies, attributes much of the company's success to its WSU location.

"The pool of excellent employees who are current or former WSU students is a valuable asset to Fairmount Technologies," said Kashani, who received his own Ph.D. from WSU. "It delivers motivated and skilled people that makes our success possible."

The company currently employs 13 people, including three WSU graduates and five WSU student interns.

Fairmount Technologies is certified to design and manufacture components and assemblies for the aerospace and defense industries. More information can be found at www.fairmounttech.com.
The Strategic Planning Steering Committee, in consultation with University Academic Affairs and the college deans, has developed a university dashboard that intentionally gauges collective performance of WSU on representative meaningful metrics.

The highlighted metric for the month is undergraduate research initiatives.

Overall university support for fostering an environment and campus culture conducive to collaborative and interdisciplinary research and creative activity at the undergraduate level is critical to the participation of students in undergraduate research. The Undergraduate Research in Creative Activity Forum (URCAF) provides an annual opportunity for undergraduate students at Wichita State University to present their scholarly and creative activity to a faculty, student and community audience.

A higher number of URCAF submissions reflects growing undergraduate interest in seeking research and creative opportunities and collaborating with faculty on those activities. This measure is related to strategic goals, including goals associated with guaranteeing applied learning and research experiences for students, pioneering interdisciplinary curricula, capitalizing on existing and emerging societal and economic trends, accelerating the discovery, creation and transfer of new knowledge and empowering students to create a campus culture and experience that meets their changing needs.

Click on the photo below for more information.
The ideas generated at U.S. research universities are often the catalysts for tomorrow’s most innovative and competitive firms. But academic research doesn’t translate into products and companies without planning and effort. Success is driven by the strategic interplay between universities, firms, entrepreneurs, research labs and independent inventors who draw strength from each other in virtuous cycles of innovation.

Research shows that these interactions are most productive when they occur in geographically dense clusters. Innovation districts — employment hubs in the cores of cities that co-locate research, entrepreneurs, housing and mixed-use amenities — are perhaps the most recent and tangible example of innovation clusters.

» Read more in “Hidden in plain sight: The oversized impact of downtown universities.”