In the following report, Hanover Research presents the results of a benchmarking analysis of innovative operational models, specifically highlighting themes and strategies among different types of institutions and organizations in the United States.
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EXECUTIVE SUMMARY

RECOMMENDATIONS

Based on an analysis of innovative operational models at different kinds of institutions across the United States, Hanover recommends that institutions:

CONSIDER HOW TO LEVERAGE DIGITALIZATION TO RETHINK ADMINISTRATIVE FUNCTIONS.

Several exemplar institutions included in this report have been able to reduce costs and increase efficiency by using digitalized services: for example, using virtual tools to provide fully- or partially-online academic advising, internship placements, or student affairs services. The current pandemic may provide an opportunity to think about how some services can be digitalized or automated in the longer term.

EXPLORE HOW LOCAL PARTNERSHIPS CAN SUPPORT THE UNIVERSITY.

Adapting to today’s rapidly-changing environment will require eliminating redundancy and achieving economies of scale through a reallocation of resources. Institutions can emulate successful leveraging of local business partnerships to equip students with the competencies they need in the job market. Innovative reorganization through partnerships can occur across a range of activities, from collaboration on curricula to allowing students to take classes on different campuses.

INITIATE A CAMPUS-WIDE DIALOGUE ABOUT INNOVATION.

Research shows that collaboration among, and input from, a variety of stakeholders is key to fostering success and can be instrumental in encouraging innovative thinking. Institutions should seek input from students, faculty, administrators, and even alumni. Outreach can also be part of a larger effort to encourage risk-taking and creative thinking.

KEY FINDINGS

Among those institutions that have adopted innovative models, three themes stand out: collaboration, taking advantage of digitalization, and fostering innovation.

Shrinking resources and rapidly-changing conditions have encouraged higher education consolidations and mergers. Successful institutions find ways to take advantage of the opportunities this presents by emphasizing collaboration, fostering a culture of creativity and risk-taking, and taking advantage of digitalization to innovate. Literature on organizational design outside higher education indicates that innovative strategic planning also requires commitment and focus.

Although institutions of higher education are being forced to rapidly confront dramatic changes, it appears that most have yet to connect their strategic plan to a new organizational and operational structure.

A few large public universities, including Arizona State University and Pennsylvania State University, have undertaken bold initiatives in their organization or model of program delivery (or both). On the whole, however, colleges and universities still mainly operate according to traditional structures, and their strategic plans reflect few innovative changes. As global technology evolves and economic conditions rapidly deteriorate in the face of the current public health crisis caused by COVID-19, institutions will need to embrace new models.

No single organizational model works best.

According to literature on organizational design, organizations’ inherent complexity—equally applicable to institutes of higher education—prevents a “one-size-fits-all” solution to failures and inefficiencies. Employing processes that seek input from a range of stakeholders is the most effective way to re-optimize according to a particular institution’s needs.
RESEARCH QUESTIONS AND METHODOLOGY

METHODOLOGY

To assist institutions as they seek to mitigate the inevitable challenges wrought by the COVID-19 crisis, Hanover conducted a benchmarking study to determine what some of the top and most innovative universities in the country are doing to connect their strategic plans to new organizational and operational structures. The analysis aims to identify themes and provide insight into how institutions might begin to re-optimize some of their internal structures.

The following analysis is based on a review of information drawn from institutional websites as well as publicly available data sources and secondary literature. Hanover selected the institutions included in this analysis based on their success in adopting new and innovative operational models.

RESEARCH QUESTIONS

- How are the most innovative institutions in the country making changes to their organizational and operational structures?
- Are there common themes in the types of strategies that institutions implement?
- What insights can be gleaned from exemplars that can be tailored to individual institutions?
- What insights can be gleaned outside of higher education?

WHY INNOVATE?

Recent research indicates that economic shifts may be driving higher education toward a new “lifelong learning” model. Under this model, students no longer select an institution according to its reputation and obtain a four-year degree not necessarily tied to their future careers; instead, the new “entrepreneurial student” obtains credentials as her career evolves from institution(s) selected for their suitability and convenience.

Central to these shifts has been the influence of technology on higher education. Colleges and universities are rethinking not only how learning and teaching occur, but also how institutions operate. The recent COVID-19 pandemic has heightened the urgency of finding new models as the crisis affects every aspect of university operations. Such changes present not only challenges but new opportunities for innovation and experimentation.

The following report provides examples of how institutions across the United States have begun developing new tactics and strategies for addressing these changes. The report highlights three themes across the models identified: emphasizing collaboration, taking advantage of digitalization, and fostering innovation.
**THEME #1: EMPHASIZING COLLABORATION**

**ANALYSIS**

Successful models of innovation rely on collaboration across the institution and with external partners.

In general, data on innovative operational models among institutes of higher education is scarce, but literature exists on the value of collaboration in improving student success outcomes. At the same time, across the higher education industry, diminishing funds (particularly for public institutions) are driving the need to collaborate and pool resources. Deloitte Insights has offered several “high-impact, low-cost” strategies for improving student success that include a reallocation of resources. For example, in late 2016, Delaware State University began a process of examining its structural inefficiencies which ultimately “led to the unification of professional advisers under the Office of Student Success” and “the consolidation of five academic colleges into four” over the subsequent two years.

Consolidation and collaboration provide opportunities for efficiency.

Mergers and partnerships among departments and even institutions can present opportunities for enhanced efficiency and improving student success. The Chronicle of Higher Education notes that allowing students to circulate among mutually-affiliated campuses could help “meet program requirements from a wider set of options and move from campus to campus, online and in person, without burdensome transfer requirements and credit loss.” In addition, these new challenges may encourage stronger relationships and communication between institutional leadership and the boards that oversee them.

While many of these models have been pioneered for state university systems (see right), private institutions can pursue similar agreements through partnerships and consortium agreements (see Page 6).

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**COLLABORATIVE MODELS**

From *Reimagining Higher Education*

- **The “Entrepreneurial University”**
  
  In this model, initially developed for public universities, individual institutions (or sub-units) “specialize in areas such as undergraduate education, vocational training, or research,” while a broad set of functions, including “faculty, departments, and academic and administrative resources” are centrally shared. Although this strategy may at first glance appear to fracture or balkanize an institution, it can in fact encourage collaboration by reducing the competition that specialization can produce.

- **The “Sharing University”**
  
  In this model, campuses or sub-units “link student and administrative services to realize efficiencies of scale....By sharing activities such as career services, international recruitment, academic advising, legal affairs, and information security, university systems can decrease spending on administration to allow for reinvestment in the academic core.”

- **The “Partnership University”**
  
  This model allows institutions to plan and make strategic investments by extending the budgeting cycle over several years and guaranteeing state funding “in exchange for agreements from colleges for tuition limits, cost savings, increased collaboration and consolidation, and private fundraising.” The model also involves partnership with businesses and employers who “provide insights on curriculum, financial assistance for equipment, and other essential resources, as well as a steady stream of students to counterbalance fluctuations in state appropriations.”

Source: Deloitte Insights
Western Governors University

Founded in 1997 by a group of U.S. governors concerned about providing education to more residents, Western Governors University has distinguished itself for its Competency-Based Education model. The programs, delivered uniquely online, measure “skills and learning rather than time.” The University is governed by a Board of Trustees “consisting of educators, industry leaders, and state governors” and supported by a National Advisory Board “made up of representatives from prestigious corporations and foundations.” University administrators also develop and guide academic programs through “guiding councils, which comprise academicians and industry experts in the various fields of knowledge.”

The Five-College Consortium

In 1965, five institutions in Western Massachusetts (Amherst College, Hampshire College, Mount Holyoke College, Smith College, and the University of Massachusetts-Amherst) formed a consortium whose member institutions “partner to offer coursework, hire faculty and staff, manage library collections, provide insurance coverage, and much more.” The consortium operates through joint governance, pools resources, and recently developed a strategic plan emphasizing a “more seamless experience,” “thoughtful administrative convergence,” “academic excellence,” and “sustainability” as its themes.

Lorain County Community College

In an effort to boost graduation rates, Lorain County Community College (LCCC) in Ohio joined two networks of other colleges dedicated to “improving student outcomes using data to inform holistic curricular and institutional changes.” These collaborative efforts helped the institution learn to use its own data to enhance student success. LCCC also formed a campus-wide team to “break down the administrative and academic silos” on its campus. Subgroups were assigned to specific tasks “such as overhauling the registration system or reorganizing developmental courses.” The institution ultimately produced a new plan that incorporated the “visions” of the entire community.

The Claremont Colleges

Other consortium models such as the Claremont Colleges in southern California illustrate how students can “attend a small, tightly-focused college even as they enjoy the benefits” of a large university. At the Claremont Colleges, these benefits include: “cross-enrollment in classes; participation in a host of multi-campus social, academic, political, creative, and religious organizations; all-campus dining privileges; and participation on a host of highly competitive NCAA Division II men’s and women’s athletic teams.”

Source: Institutional websites
ANALYSIS

Technological changes are encouraging a move toward educational models based on learning outcomes.

In his 2008 book, the late Harvard Business School professor Clayton Christensen “prophesized” the changes computerized learning would bring to higher education. Christensen argued that institutions would move toward “student-centric classrooms” and “customized learning,” and encouraged policy-makers and institutions to focus on measures of success other than degree attainment, course credits, and grades.

Drawing on these arguments, William G. Tierney of the University of Southern California’s Rossier School of Education asserts that online learning is forcing institutions to reconsider the notion of “seat time.” According to Tierney, online learning is conducive to an emphasis on learning outcomes rather than fulfillment of a required number of credit hours (typically based on attending one or two classes per week over a set number of weeks).

Innovative institutions are taking advantage of technology to rethink their administrative functions.

As the price of postsecondary education—and even expenditures on faculty—fall due to the growth of online courses, institutions’ expenditures on overhead, including administrative personnel and infrastructure (p. 5), can be reduced as well. Particularly since the COVID-19 pandemic began forcing nationwide campus closures, innovative institutions are seeking means of leveraging technology into an advantage by delivering services other than classroom education through technology-based platforms (see right).

Digitalizing the Student Experience

Innovative campuses have found ways to move other student services online:

- **Student Advising**
  - Arizona State University’s E-Advisor program, in which students use a software to identify majors relevant to their career interests, has sparked similar programs at Georgia State and elsewhere.

- **Internship Placements**
  - 13 institutions have partnered with the startup Koru to manage internship placements. The organization connects universities with “leading employers” to provide “immersive learning experiences that emphasize skills development, coaching, and mentorship.”

- **Global Freshman Academy**
  - Arizona State University, in partnership with the nonprofit venture edX, uses a massive open online course (MOOC) platform for its Global Freshman Academy (GFA) program. The program allows students to earn course credits for which they pay “only after passing the course and only if they want the optional university credit.”

- **Student Affairs**
  - InsideTrack, a nonprofit that partners with colleges and universities to improve student success, has studied how leaders in the student affairs profession and in online learning can transition to new models of higher education. InsideTrack argues that “flipping” student support services make these services more efficient and effective by using videos and other technological tools to provide general information, freeing up in-person time for counselors to focus on a student’s particular needs.

Source: Deloitte Insights; Gilbert et. al; InsideTrack
## Exemplar Institutions

### Arizona State University

Arizona State University has organized its teaching and learning into four realms. Cutting across the four realms are “technology-driven enhancements” as well as “structural” partnerships with community colleges that support transfer pathways.

<table>
<thead>
<tr>
<th>Realm #1</th>
<th>Realm #2</th>
<th>Realm #3</th>
<th>Realm #4</th>
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<tbody>
<tr>
<td>is focused on campus-based immersion. In this realm, “3,400 faculty members interact closely with more than 71,000 students.” Campus learning is supported by technology enhancements, including “digital learning spaces” and “personalized learning at scale.”</td>
<td>In Realm #2, campuses and departments offer fully online delivery of degree programs that include an “integrated human-tutor interface” and real-time and development-based assessment.</td>
<td>Realm #3 “provides open scale digital immersion learning” through massive open online courses (MOOCs). Realm #3 emphasizes (among other features) “content and delivery for any life stage.”</td>
<td>Realm #4 focuses on “education through exploration,” including group learning tools such as “virtual field trips, game-based learning, and personalized learning.”</td>
</tr>
</tbody>
</table>

Source: Gilbert et. al.; Arizona State University

### Southern New Hampshire University

Southern New Hampshire University recently launched College for America, a subsidiary nonprofit institution offering undergraduate degrees and certificates to nontraditional learners through competency-based tracks. In these programs, “students advance by demonstrating proficiency through applied projects rather than traditional coursework.”

Source: Gilbert et. al.

### Pennsylvania State University

Pennsylvania State University is a large public university for whom “serving nontraditional students from Pennsylvania’s rural population has long been a part of its identity.” In 1998, it launched one of the nation’s first online branches, World Campus. When a student enrolls in a World Campus course, the college that offers that course keeps a portion of the discretionary revenue. This provides “incentives for academic units to promote and accommodate World Campus growth and ensure that students receive the same level of support as on-campus students.”

Source: Gilbert et. al.
THEME #3: FOSTERING INNOVATION

OVERVIEW

Some institutions experience success using matrix organizational models.

Universities are sometimes considered organizations weighed down by tradition. Their division into disciplinary-based units that rarely interact (and sometimes even compete) with one another, can stifle innovation and success. The matrix structure found in organizations outside of higher education was developed to “ensure lateral coordination” between various units and in theory foster creativity and growth. According to some research, matrices succeed through both “hard-wiring,” or formal organizational structures meant to accommodate how organizations function in practice, and “soft-wiring,” or more informal communication and collaboration across units. While appealing in theory, organizations can fall victim to a number of problems when trying to implement such models, and no “one-size-fits-all” solution exists.

Spotlight

The Office of Academic Innovation at Portland State University was created to enhance student learning through the "strategic use of learning innovation." In addition to using innovation to “transform” learning, the OAI organizes campus events and funds projects “that explore alternative pedagogies or pioneer digital learning tools.”

Butler University undertook a similar initiative when it created the Academic Program Development and Innovation (ADPI) project. The ADPI "has assisted with optimizing new and existing academic programs" across the university, which has led to expanded enrollments and increased the number of offerings.

Innovation through Collaboration

The concept of open innovation allows firms “to reach beyond their organizational boundaries and tap the outside expertise of a broader set of individuals than they could otherwise reach.” In the open innovation processes, companies put forth “an innovation problem they are facing to the public (or, at least, a community of individuals outside of their firm)” and then invite individuals “to submit solutions to that problem.”

A related concept, “organizational resiliency,” assumes that leaders must experience “true vulnerability” in order to overcome crises. For higher education leadership, this means collecting insights – including criticism, or honest feedback – from across the campus community. Such resiliency can allow institutions to follow in the model of organizations such as Nike, Boeing, Ikea, and Lowe’s to "envision bold, positive transformations."

Research on how organizations innovate emphasizes the importance of fostering a culture of innovation.

Experts argue that organizations – including universities – where risk is encouraged and creative thinking is rewarded, cultivate innovation through fostering a collaborative environment.

Moreover, some experts argue that the inherent complexity of organizations requires each one to develop unique solutions to failures and inefficiencies, which reinforces the need for institutions to bring stakeholders together in such a way that responds to the particular institutional environment.
FINDINGS FROM THE LITERATURE

Organizational reform requires commitment to an innovation strategy.

Authors Joshua Kim and Edward Maloney have studied the ways in which different universities embrace learning innovation through a "deliberate and systematic approach." These authors claim that innovation in program delivery requires investing in “fundamental changes,” such as pairing faculty with a learning design team in the development of online courses or developing an economic model for online degree programs that bring their price significantly below the campus program equivalent. The authors also encourage colleges and universities to "commit to rigorously aligning new educational programs to a broader strategy."

Different types of innovation should be addressed by separate institutional functions.

Methods like Design Thinking, that emerged from studies of organizational design, have also been applied to higher education. According to such models, institutions should assign specific responsibility for innovation to differentiated functions of the university based on the type of challenge. For example, challenges in traditional and emerging education markets should be treated as independent and addressed through separate divisions. This can offer opportunities “to reinvigorate the core of the academic institution” while simultaneously exploring new areas that tradition does not accommodate.

New innovations require new business models.

According to Christensen, online learning requires institutions to adopt new business models; otherwise, the old business model will “coopt” the innovation into the existing methods. He urges institutions and policy-makers to implement a “strategy of focus” as they transform curricula and learning into systems aimed at preparing students for their careers.

INNOVATION IN RESEARCH DIFFERENTIATION

The Rockefeller University “has achieved and maintained its status as a global leader in biomedical research and training while operating pursuant to its motto, ‘Science for the benefit of humanity.’” With “no departments, no chairs, and little administrative hierarchy,” the university’s scientists “are loosely clustered into ten research areas representing the broad fields of study most actively pursued:"

➢ Biochemistry, biophysics, chemical biology, and structural biology
➢ Cancer biology
➢ Cell biology
➢ Genetics and Genomics
➢ Immunology, Virology, and Microbiology
➢ Mechanisms of Human Disease
➢ Neurosciences and Behavior
➢ Organismal Biology and Evolution
➢ Physical, Mathematical, and Computational Biology
➢ Stem Cells, Development, Regeneration, and Aging

With multiple labs under each research area, this unique organization fosters "an exchange of ideas between fundamental research and clinical investigation" at the core of the university's mission.

Source: Rockefeller University, Gilbert et. al.
In 2000, Brigham Young University-Idaho (BYU-Idaho) instituted a new academic calendar in which applicants are assigned a cohort (beginning in either fall, winter, or spring term) with which they remain through graduation. Because each cohort attends only two of the three terms during the year, BYU-Idaho has been able to “effectively [grow its capacity] by 50 percent without adding infrastructure,” while avoiding the idle summer period of most university campuses. BYU-Idaho also “keeps the system flexible by allowing students to take online courses at any time, regardless of their cohort calendar, and offering qualified students the option to enroll year-round to accelerate graduation.”

Source: Gilbert et. al.

**Fostering a Culture of Innovation**

Higher education expert William G. Tierney has outlined the conditions under which universities can create a culture of innovation that allows them to “achieve and sustain world-class status.” He discusses the importance of seven elements:

- Risk-taking
- Personal Autonomy
- Goal Setting
- Teamwork
- Fiscal and Temporal Resources
- Organizational Excitement
- Decision-Making

**Spotlight: Duke University**

Leadership at Duke University has been recognized for facilitating the university’s evolution from a mid-1800s “wooden schoolhouse in Randolph County to a modern research university whose work and influence extend around the globe.” The innovative thinking of its leadership was most recently presented in its 2017-2022 strategic plan. The plan defines four goals collectively intended to “invest in human capital” and aims to “build community” while complementing and strengthening new interdisciplinary programs and construction and renovation efforts launched during the previous decade.

- **Goal 1**: Invest in the Duke faculty as scholars and leaders of the university’s intellectual communities
- **Goal 2**: Provide a transformative educational experience for all students
- **Goal 3**: Strengthen Duke’s capacity to address global challenges for communities across the world
- **Goal 4**: Create a supportive environment for research, learning, and academic communities

Three themes are meant to reinforce these goals:

- **Theme 1**: Inquiry and Discovery, emphasizing an investment in science
- **Theme 2**: “The Duke Opportunity,” or the university’s commitment to “provide all students a transformative educational experience”
- **Theme 3**: “Globally Engaged, Locally Grounded,” or international outreach through a “focus on large social, economic, and environmental issues that are common to societies around the world.”

Source: Duke University
APPENDIX: INNOVATIVE OPERATIONAL MODELS

The following table provides an overview of institutions whose innovative operational models and strategies are profiled in this report:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Location</th>
<th>Description of Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona State University</td>
<td>Phoenix, AZ</td>
<td>• Re-organization of teaching and learning into four “realms”</td>
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<tr>
<td></td>
<td></td>
<td>• Incorporation of technology into student services such as student advising and the for-credit Global Freshman Academy (GFA) program</td>
</tr>
<tr>
<td>Brigham Young University-Idaho</td>
<td>Rexburg, ID</td>
<td>• Adoption of “three-term, year-around” academic calendar</td>
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<tr>
<td>Butler University</td>
<td>Indianapolis, IN</td>
<td>• Adoption of Academic and Program Development Innovation initiative</td>
</tr>
<tr>
<td>Claremont Colleges</td>
<td>Claremont, CA</td>
<td>• Allowing students to take courses, participate in athletic activities, attend events, and take advantages of other services across five undergraduate and two graduate institutions</td>
</tr>
<tr>
<td>Duke University</td>
<td>Durham, NC</td>
<td>• Adoption of 2017-2022 strategic plan that builds on previous interdisciplinary and physical infrastructure initiatives while “investing in human capital”</td>
</tr>
<tr>
<td>Lorain County Community College</td>
<td>Elyria, OH</td>
<td>• Joining of college networks to learn how to make use of internal data in order to improve student success</td>
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<td></td>
<td></td>
<td>• Formation of a campus-wide team sub-divided into smaller units in charge of specific tasks</td>
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<tr>
<td></td>
<td></td>
<td>• Development of a community-wide vision</td>
</tr>
<tr>
<td>Pennsylvania State University</td>
<td>State College, PA</td>
<td>• Establishment of World Campus, a set of online programs in which academic departments are incentivized to participate</td>
</tr>
<tr>
<td>Portland State University</td>
<td>Portland, OR</td>
<td>• Establishment of Office of Academic Innovation</td>
</tr>
<tr>
<td>Southern New Hampshire University</td>
<td>Manchester, NH</td>
<td>• Establishment of College for America, a subsidiary non-profit that uses a competency-based education model</td>
</tr>
<tr>
<td>Western Governors University</td>
<td>Salt Lake City, UT</td>
<td>• Governance through advisory councils of local businesses and guiding councils of area experts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Competency-based education model delivered through distance learning</td>
</tr>
</tbody>
</table>

Source: [College Navigator](#)