Introduction

The Graceland Innovation Committee (GIC) has updated this report to identify and present current trends and emerging issues that could potentially impact the future of higher education – Graceland’s future!

The report identifies key indicators of what may be coming to the higher education industry based on a review of the higher education literature, journals, news reports and other sources, discussed in their regional context to highlight any potential impact on the task, general, and global environments of Graceland. It is intended to create an awareness of coming changes, to elevate and broaden thinking, and to set the stage for proactive strategic planning.

The relevant issues are organized into the following categories: Social, Technological, Economic, Environmental, and Political (STEEP). Each section concludes with recommendations for consideration by Graceland planners.

GIC’s goal is to create general awareness and to provide part of the foundation for future discussion and investigation into oncoming trends, issues and planning.

Respectfully submitted,

Graceland Innovation Committee
Paul Binnicker (chair)           Dr. Lydia Johnson
Emily Alexander                 Dr. Dennis McElroy
Dr. Katie Clauson Bash          Dr. Dan Platt
Alison Choate                   Dr. Rob Poulton
Urmila Harold                  Dr. Tim Robbins
John James                      Ozzie White
Executive Summary

This environmental scan focuses on key developments that influence the Social, Technological, Economic, Environmental, and Political (STEEP) framework of the higher education industry. The Graceland Innovation Committee (GIC) developed this environmental scanning report to identify current local, national and international trends and emerging issues that have the potential to affect the future of Graceland University.

Below is a summary of the committee’s observations and recommendations:

<table>
<thead>
<tr>
<th>Category</th>
<th>Observations</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>Millennial Students:</td>
<td>To accomplish Graceland’s strategic plans to develop dynamic, high-impact learning opportunities for students, staff, and faculty, Graceland should:</td>
</tr>
<tr>
<td></td>
<td>• Want ‘hands-on’ learning</td>
<td>1. Review whether web content is compatible with mobile devices</td>
</tr>
<tr>
<td></td>
<td>• Want technology-facilitated learning</td>
<td>2. For all types of learners, review whether marketing and recruiting materials demonstrate how a Graceland education can facilitate jobs and learning potential</td>
</tr>
<tr>
<td></td>
<td>• Are more diverse and inclusive</td>
<td>3. Provide professional development opportunities to help faculty and staff understand Gen Z dynamics, relevant pedagogies and how technology and social media can improve communication with each other and with students</td>
</tr>
<tr>
<td></td>
<td>• Are fewer, lower income, and less prepared</td>
<td>4. Evaluate learning tools and student services according to type of student served based on professional sources and standards</td>
</tr>
<tr>
<td></td>
<td>• Want to be close to home</td>
<td>5. Continue to prioritize the strategic objective of recruiting more regional students</td>
</tr>
<tr>
<td></td>
<td>• Have high expectations for college</td>
<td>6. Evaluate the best delivery source for each program: Lamoni campus, Independence campus, online or hybrid</td>
</tr>
<tr>
<td></td>
<td>Generation Z students:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Are optimistic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Are more like adult learners</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Are more diverse than ever before in ethnicity and gender fluidity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Prefer active, hands-on learning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Are digitally innate but unlikely to evaluate information sources</td>
<td></td>
</tr>
<tr>
<td>Technological</td>
<td>Trends</td>
<td>1. The items mentioned in the 2018 STEEP report (data analytics, microcredentials, and active learning) continue to be relevant</td>
</tr>
<tr>
<td></td>
<td>• Unbundling, rebundling and rebuilding programs</td>
<td>2. Prioritize data integrity and security. Databases need to be current and IT staff need hard skills to build/maintain a functional database system, and soft skills to provide excellent service and support</td>
</tr>
<tr>
<td></td>
<td>• Essential Education, especially Digital Citizenship and Critical Thinking</td>
<td>3. A functional LMS requires standards, taxonomy, configuration management, and system housekeeping. Instructional Designers know learning theory and techniques to support students; their online courses and their roles should be expanded. Governance of the LMS needs to be broadened by empowering Instructional Designers. A working group to include representatives of faculty, IT, Instructional Design, and executive leadership) should</td>
</tr>
<tr>
<td></td>
<td>• Use of Open Educational Resources (OERs) is increasing and related legislation is emerging</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• New technologies continue to emerge that could impact learning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Learning Management Systems (LMS) need to be optimized and managed by knowledgeable professionals who understand student dynamics and needs.</td>
<td></td>
</tr>
</tbody>
</table>
determine the best division of responsibilities and permissions to ensure student needs are met.

4. Incorporate technology into every classroom to prepare students for using it in the workplace

<table>
<thead>
<tr>
<th>Economic</th>
<th>Economic Threats:</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Increasing US interest rates'</td>
<td>'Modest US economic expansion'</td>
</tr>
<tr>
<td>'Low US inflation'</td>
<td>'Slowing Chinese and European economies and trade tensions'</td>
</tr>
<tr>
<td>'Student debt is at a record high with more than $1M defaults/year'</td>
<td>'Changing federal aid policies'</td>
</tr>
<tr>
<td>'As more students want to study closer to home, Midwest demographics are declining'</td>
<td>'Income levels are decreasing'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Economic</th>
<th>1. Invest in both Lamoni &amp; Independence campus programs and facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Grow current programs and create new programs that are leading to strong labor market outcomes.</td>
</tr>
<tr>
<td></td>
<td>3. Create offerings for expanding student populations</td>
</tr>
<tr>
<td></td>
<td>4. Assess budget impacts of cost-cutting measures</td>
</tr>
<tr>
<td></td>
<td>5. Prepare financially for the next economic downturn</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental</th>
<th>Environmental Threats:</th>
</tr>
</thead>
<tbody>
<tr>
<td>'More severe storms, extreme heat'</td>
<td>'Environmental migrations'</td>
</tr>
<tr>
<td>'Depletion of water resources'</td>
<td>'Loss of species diversity'</td>
</tr>
<tr>
<td>'Political polarization of environmental issues'</td>
<td>'Opportunities:'</td>
</tr>
<tr>
<td></td>
<td>'Small farm and local food movements'</td>
</tr>
<tr>
<td></td>
<td>'Shifting energy portfolios'</td>
</tr>
<tr>
<td></td>
<td>'Growing “Green Economy”'</td>
</tr>
<tr>
<td></td>
<td>'Waste reduction and efficiency'</td>
</tr>
<tr>
<td></td>
<td>'Some research indicates that students prefer urban campuses'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental</th>
<th>1. Acknowledge, Plan, and Act</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Leverage Resources &amp; Alumni Connections to the Green Economy</td>
</tr>
<tr>
<td></td>
<td>3. Develop Relevant Curriculum and Programming</td>
</tr>
<tr>
<td></td>
<td>4. Connect to the Environmental Attitudes of Generation Z</td>
</tr>
<tr>
<td></td>
<td>5. Make Environmental Weaknesses into Strengths</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Political</th>
<th>Looming changes to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Revocation of affirmative action and transgender student guidelines'</td>
<td>'Modification to guidance regarding racial bias in school discipline'</td>
</tr>
<tr>
<td>'Elimination of Gainful Employment'</td>
<td>'Simplification of accreditation'</td>
</tr>
<tr>
<td>'Modification to federal definitions of ‘Credit Hour’ and ‘regular/substantive interaction with faculty’'</td>
<td>'Modified faith-based school funding'</td>
</tr>
<tr>
<td>'Elimination of outsourcing restriction'</td>
<td>'Elimination of Public Service Loan Forgiveness (PSLF) Iowa Bill 3179 – Open Education Resources'</td>
</tr>
<tr>
<td>'Missouri Bill 225-Workforce Grant (Scholarship First Degree)'</td>
<td>'Community Colleges to Offer Baccalaureate Degrees in Missouri.'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Political</th>
<th>1. Monitor and respond to pending changes from the US Department of Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Explore Regulation Implications of Open Education Resources (OER)</td>
</tr>
<tr>
<td></td>
<td>3. Adapt to Dynamic Changes in Community Colleges</td>
</tr>
<tr>
<td></td>
<td>4. Respond to Current Perception Issues Regarding Higher Education</td>
</tr>
</tbody>
</table>
Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table of Contents</td>
<td>4</td>
</tr>
<tr>
<td>Context and Methodology</td>
<td>5</td>
</tr>
<tr>
<td>Social Issues</td>
<td>6</td>
</tr>
<tr>
<td>Recommendations and Planning Considerations</td>
<td>8</td>
</tr>
<tr>
<td>Technology Issues</td>
<td>9</td>
</tr>
<tr>
<td>Recommendations and Planning Considerations</td>
<td>15</td>
</tr>
<tr>
<td>Economic Issues</td>
<td>16</td>
</tr>
<tr>
<td>Recommendations and Planning Considerations</td>
<td>19</td>
</tr>
<tr>
<td>Environmental Issues</td>
<td>21</td>
</tr>
<tr>
<td>Recommendations and Planning Considerations</td>
<td>22</td>
</tr>
<tr>
<td>Political Issues</td>
<td>25</td>
</tr>
<tr>
<td>Recommendations and Planning Considerations</td>
<td>27</td>
</tr>
<tr>
<td>Conclusion</td>
<td>28</td>
</tr>
<tr>
<td>Recommendations and Planning Considerations</td>
<td>29</td>
</tr>
<tr>
<td>References</td>
<td>36</td>
</tr>
<tr>
<td>Appendix</td>
<td>36</td>
</tr>
</tbody>
</table>
**Context and Methodology**

“*Environmental scanning: The art of systematically exploring and interpreting the external environment to better understand the nature of trends and drivers of change and their likely future impact on your organization.*”

Conway (2009) defined environmental scanning as “the art of systematically exploring and interpreting the external environment to better understand the nature of trends and drivers of change and their likely future impact on your organization.” The Graceland Innovation Committee has used this methodology to write this report, which is intended to provide a broad view of the external environment within which Graceland functions, with a focus on trends and forces that could influence Graceland’s future. The recommendations presented in this study are intended to inform Graceland’s planning processes.

Since strategic planning is about the future, the GIC has attempted to include emerging issues that may or may not develop into major trends in order to broaden the context for decision-making. It is impossible to be proactive without considering what the future will bring. Shaping Tomorrow, 2008, notes, “Competitive advantage comes from the periphery, from emerging issues – not from trends.” An awareness of both trends and emerging issues will best help Graceland shape its future.

The need for regular, continuous environmental scanning and analyses is vital in today’s dynamic marketplace. Daft (2010) discusses the interaction between environmental complexity and environmental stability, and concludes that during periods of great change planning should become more frequent. The higher education environment will most likely remain uncertain for the foreseeable future, and Graceland will need to routinely review and adjust flexible plans. Therefore, this scan is an update of the GIC’s summer 2018 STEEP report.
Social Issues

Overview: Graceland’s commitment to transform lives requires that Graceland understand the dynamics of the students we serve. This section addresses those students who are most likely to enroll at Graceland, Generation Z, the group of Americans who were born after 1998 and who mainly make up Graceland’s traditional programs, and Generation Y, more commonly known as millennials, the group born between 1977 and 1997 who primarily populate Graceland’s Independence and distance programs.

Observations of Existing and Emerging Social Issues:

Generation Z
It is imperative for an educational institution to understand the students it serves. Ongoing research provides opportunities to stay abreast of dramatically changing student profiles. The students currently enrolling in the Graceland’s traditional programs generally belong to Generation Z (Gen Z). Even though Gen Z shares many of the characteristics of millennials, the culture analysts predict a variety of differences (Rue, 2018).

According to some of the observations made by analysts, Gen Z is optimistic and more like adult learners (Larkin, 2017) in that they are financially conservative, focused on career training, and want their education based on workplace skills. They are mindful of future and it seems that hopeful optimism of millennials can be combined with Gen Z’s practical goal orientation (Rue, 2018). Technology is second nature to them. Colleges may find it challenging to provide connectivity to all their electronic devices. They are the early adopters of new technology. They prefer updated platforms and navigate through changes comfortably. They can move through massive information quickly and filter it constantly by taking into consideration if they need it, would it affect them, why should they care. Jeremy Finch (2015) calls it an eight-second filter. They also enjoy conveying messages through images, such as emojis and gifs (Rue, 2018).

Gen Z is Diverse and Concerned: Gen Z is the most diverse generation in the U.S. history (Rue, 2018). The top three concerns for Gen Z are prejudice/racism, financial crisis, and education (Fuse Marketing, 2015). They want to see an equitable world. Smart phones have provided them an opportunity to connect with diverse communities (Rue, 2018). Different language, place, and culture are not limiting factors in a virtual world. They do not seem to believe in gender binaries. They express gender fluidity in their style and challenge gender boundaries in day-to-day work.

Gen Z Needs Support: Gen Z members spend most of their time on smart phones and have been reported to be more fragile emotionally (Rue, 2018). They feel left out when they compare other’s good days on the social media to their worst days. Adults can help them learn the struggle behind social media masks. Nationally, the need for professional counselors to support this group of students is increasing.

The Impact of Technology on Learners: Gen Z likes to be engaged in the classroom. These students prefer active and collaborative learning (Rue, 2018). In addition to the traditional pedagogical tools, they use skype, digital textbooks, and game-based learning.
systems. They learn and apply rapidly. Some analysts suggest that they are so proficient in technology that they may help faculty find technological teaching solutions. The members of Gen Z are quick in searching and retrieving answers in the internet without checking the credibility of the information. Faculty must need to assist them learn how to think critically in order to evaluate the reliability of sources.

Because of Gen Z’s technological facility, residence halls struggle to provide sufficient bandwidth and connectivity for a variety of electronic devices, and colleges have had to add Wi-Fi in places where it hasn’t previously existed—like stadiums and quadrangles. Claire Povah and Simon Vaukins, in the UK’s Guardian newspaper, use the term “digitally innate” to describe this generation, a term that captures the seamless way they interact virtually (2017).

According to Jeremy Finch (2015), “It’s not an attention problem, it’s an 8-second filter. What may appear as shallow to us as educators can also be seen as remarkable breadth. I suspect they will be able to synthesize disparate information rapidly and fluidly.”

Barnes & Noble College conducted a study of 1,300 diverse 13- to 18-year-olds about their expectations for college and found, similarly, that students seek to be challenged and engaged in the classroom. For example, almost half of students entering college have already earned college credit. The students surveyed expressed a clear preference for active and collaborative learning so they can apply as they learn.

An article titled, “How to Teach Generation Z Students” by Dawn Wotapka (2017), acknowledges that “Gen Z are not mini-Millennials,” and provides tips for adapting pedagogies to this newest generation. These include:

- Using portals to store lecture notes and e-books, as Gen Z students are used to accessing materials digitally and conveniently
- Breaking up long lectures
- Making information more digestible by using charts, graphics, and videos
- Opening up Skype or FaceTime office hours
- Explaining how lessons are applicable to the real world

The Non-Traditional Learner
Non-traditional student populations are increasing; in some cases, twice as fast as traditional student populations (Center for Postsecondary and Economic Success, 2015). It is estimated that 40% of the current American undergraduate population consists of non-traditional students (Center for Postsecondary and Economic Success, 2015).

The definition of a non-traditional learner can vary across institutions, but the majority consider a non-traditional student to be age 25 years or older (Hittepole, n.d.). Catherine Cash (2013) classified the following persons as non-traditional learners: veterans, adult learners, distance learners, parents, caretakers, married students, GED students, re-entry students, full-time employees, part-time employees and financially independent students.
Independence University (2017) provides six main reasons that adult learners return to college, including: competitive advantage or career advancement, job security, to pursue a different career, to set an example, and to gain knowledge or a sense of accomplishment. On average, college graduates make almost twice the income of their high school graduate peers (Independence University, 2017). That in itself is a large incentive to return to school. In addition, and according to the same research, career advancement is just as much a driving force, as a degree may be required for promotion. Career position motivates learners of all ages.

**Social Recommendations and Planning Considerations**

U.S. institutions must prepare for the Gen Z’s expectations for responsiveness, service, and engagement. For example, web content needs to be compatible with mobile devices, marketing and recruiting need to demonstrate how a Graceland education will be beneficial as they enter the job market; professional development opportunities should help faculty and staff understand Gen Z dynamics and relevant pedagogies. Faculty and staff need to learn how technology and social media can improve communication with each other and with students. Those who allocate resources need to understand what tools are available and how they can improve student learning. This is consistent with Graceland’s strategic plans to develop dynamic, high-impact learning opportunities for students, staff, and faculty.

Despite the growing population of adult learners, higher education institutions are most often designed to meet the needs of the traditional student population (Rabourn et al, 2018). Their research concluded that colleges and universities continue to create and adhere to policies that solely benefit the traditional student. As complex as Graceland is, Graceland needs to evaluate its services in the context of the type of student served. Non-traditional students are balancing a career, home and family. The Independence campus is in a perfect location to reach those juggling homes, families and careers while obtaining an education. With so few programs offered both online and on campus in Independence, GIC recommends growing the number of program offerings there. It may be the right time to evaluate the programs offered in Lamoni and see what may be better offered online or offered online and in Independence in addition to in Lamoni.

If not already a member, Graceland may want to work with the Association for Non-Traditional Students in Higher Education (ANTSHE), an organization that provides support to academic professionals in order to better serve the non-traditional student.

The American Council on Education (ACE) conducted a study in 2016 that suggests geography matters more now than ever before due to today’s students’ family and community ties, dependents and full-time jobs.
Technology Issues

**Overview:** The rapidly evolving technology environment creates unique challenges as well as opportunities for the modern university. Research and marketing organizations are always looking to the future and several have identified key topics that should be addressed in higher education. These include Unbundling/Rebundling (micro-credentials), digital citizenship, open education resources (OER), student success focus, emergent technologies, the role of IT and Instructional Design in the institutional operation success, student focused learning management systems (LMS), digital security, and data-driven decision making (Digital Marketing, 2019).

In order to stay relevant in the educational process, Graceland University must develop solutions to address each of these issues. This report will provide background information on what each topic is, what it means to higher education, and what it means for Graceland. Note: An important and guiding document Graceland administration and faculty should review is the “Higher Education Supplement to the National Education Technology Plan” (King, et al, 2017).

**Observations of Existing and Emerging Technological Issues**

**Unbundling/Rebundling and Rebuilding:** *Unbundling* is the process by which an institution breaks apart traditional programs to provide shorter and more flexible options for students. This is greatly influenced by changing technologies that allow students to learn in different ways and at a quicker pace (Digital Marketing, 2019). Many institutions such as MIT offer mixed options where students can take much of their program online and end with an on-campus residency during the last semester. *Rebuilding* is the process by which institutions take the disaggregated or unbundled components and put them together in new offerings. As discussed in the 2018 STEEP report, microcredentials are perfect examples of how higher education can meet these criteria. Graceland can support and encourage the faculty who have taken the initiative to begin developing microcredentials.

**Essential Education:** Mathewson stresses that four-year *liberal arts* programs will still be in high demand as these programs prepare students for a lifetime of learning (Mathewson, 2016). Critical thinking is especially important in light of the concern mentioned in the first section, that Gen Z learners may not have the skillset or digital citizenship to effectively inform their own postings or to assess their sources of information sources, which are more likely than ever to be unlimited and unmonitored.

**Digital Citizenship:** Digital citizenship refers to ““The quality of habits, actions, and consumption patterns that impact the ecology of digital content and communities” (Heick, 2018). According to Susan Detrie (2018), there are few efforts in higher education to teach students about digital citizenship because institutions assume that this generation is “tech savvy” and “the first social media generation.” However, this does not automatically mean they are versed in digital literacy and citizenship skills. Several questions need to be considered:
• Are students adequately prepared in their pre-higher education experiences to analyze online information?
• Where did they learn how to discern ‘real’ from ‘fake’ news?
• Where did they learn how to tell if an email is a spoof?

Facebook is still the dominant social media platform with 68% of the adult population using it. In 2016, Facebook was the platform of choice by the Russians to spread disinformation related to the election (Frenkel & Benner, 2018). As of 2016, 78% of college graduates use social media and the number is increasing (Detrie, 2018). The relationship of digital citizenship and liberal arts is further addressed in a case study titled, “Digital Citizenship + Liberal Arts = Students Empowered for Life” (Almekinder, et al., 2017). Institutions must recognize the need for digital citizenship; it is vital to respecting Graceland’s mission and values.

At Graceland, fifteen courses currently include the word “ethics” in their description. There are numerous courses that fall under the concept of “World Citizenship” in Graceland’s Essential Education program. Very few, if any, of these courses provide the entire package outlined by the International Society for Technology in Education standards (ISTE, 2019) or address all of the questions mentioned above. Most courses are offered for specific academic populations, such as EDUC4100 which covers copyright, fair use, and creative commons for education students. Yet, this same course doesn’t address all of the needs of students as outlined above.

Almekinder, et. al. (2017) present this challenge:

Today's postsecondary education must focus on critical thinking, security, and empowerment as we move collectively into an uncertain digital future and seek to influence its shape and affordances. Liberal arts colleges emphasize preparing students to be lifelong learners, creative and critical thinkers, and engaged members of whatever communities they enter after college. In the 21st century, our graduates enter a world in which the landscape of economic, civic, social, and intellectual discourse and activity are profoundly shaped by digital tools and platforms. **How do institutions who value these characteristics prepare students for this digital world?** (emphasis added)

In order to properly address the concept of digital citizenship as describe in the national standards, Graceland University must invest in faculty and administrator development, creating buy-in from the top down, employ creative solutions (such as unbundling), develop the means to provide students with learning opportunities and experiences in all areas of digital citizenship, and keep the university mission and values at the forefront of these efforts.

Another significant challenge is faculty development in technology. Faculty development has been the number one most important teaching and learning issue for the past five years. This information was gleaned from an EDUCAUSE survey of nearly 1500 higher education people (EDUCAUSE, 2019a). And yet, according to the National Educational Technology Plan (King, et al, 2017), “Across the board, … professional development programs fail to prepare teachers to use technology in effective ways.” The
implementation of a professional development plan not only requires buy-in from participants, but commitment by the university to provide instructional technology personnel to help facilitate faculty growth.

**Open Educational Resources:** According to the editors at *Inside Higher Education*, we’re living through the “OER Moment” (Dimeo 2017). At the center of this lively discussion, poised at the intersections of educational technology and academic persistence, are Open Educational Resources or OER. OER are learning materials—including textbooks and other interactive multimedia—made free and available on the web for download, revision, and recirculation by students and instructors (Organization for Economic Co-operation and Development, 2017). That the OER movement is having a moment is more than just a case of its digital trendiness. Rather, the cost savings passed on to students – particularly to first generation, new majority students – make free and open materials a basic matter of social justice. Recent studies, like the Florida Virtual Campus survey (Florida Virtual Campus, 2018) show that the integration of free and open resources helps drastically cut overall textbook costs, thus increasing access and improving learning and retention (Arvanitakis, 2017). Providing high-quality, low-cost textbooks can help make higher education more affordable and thus more equitable and just. OER is a contribution towards this end.

Another payoff of including OER in the curriculum comes from the way it catalyzes teaching and learning through intellectual collaboration. Over and above replacing expensive industry textbooks, OER proponents have shown that the virtues inherent to open materials call for innovative kinds of pedagogy, methods that embrace the open ethos to reuse, remix, revise, and redistribute in content and practice. David Wiley (2013), for example, has challenged instructors to discard the “disposable” individual assignment in favor of collaborative and “renewable” open projects. Gardner Campbell (2017) recently called for an open pedagogy centered on producing insight, where educators turn design over to students, encouraging them to take responsibility for their own learning. “Open access” thus relies upon a diverse network of stakeholders – teachers, scholars, librarians, designers, and students themselves – to develop open strategies, assignments, tools, and methods of assessment (American Library Association, 2007). The ease of collaboration facilitated by small liberal arts institutions means Graceland University is well positioned to pursue such open endeavors.

Section 6, Political Trends, explains that the Iowa Senate is currently studying Bill 3179 that would begin to define requirements for use and disclosure of Open Education Resources (OER) at postsecondary institutions within the state. Under the proposed bill, all postsecondary institutions receiving financial aid for students would need to (1) submit an annual report regarding the number of minority students and minority faculty members employed at the institution, (2) identify in the institution’s course catalog the individual courses that will use open education resources, and (3) develop and implement a 5-year plan to increase the number of courses utilizing open education resources throughout the institution (Iowa Legislature, 2019).

Whether the bill comes to fruition, as a transformative institution with a roster of caring and dedicated educators, Graceland can play a vital role in this movement. We might begin by simply identifying and building on those “open” aspects already working on campus under
different auspices. One development worth exploring in this vein comes with the recent announcement of a partnership between Lumen Learning and the Follett Corporation (Straumsheim 2017). Graceland should be working with bookstore director Marcia Core to learn what Follett will have to offer in terms of OER. Graceland can disseminate textbook cost and use surveys (a preliminary version has been created by Tim Robbins and Jim Uhlenkamp in Spring 2017). Perhaps the easiest place to begin is with the formation of an Open Educational Resources task force. This group could be tasked with building OER awareness and promoting its integration into the curriculum, developing guidelines and standards relating to the adoption of OER across the curriculum, making recommendations to the Vice President of Academic Affairs and relevant University constituencies representing faculty, students, and staff, identifying professional development needs required for effective and sustained implementation of OER-based curricula, and promoting OER awareness and develop collaborative relationships within and beyond GU.

Of course, on the more difficult question of securing resources, Graceland should be exploring the various non-profit grant-funding agencies – such as Hewlett – which have helped get programs off the ground at similar institutions. In terms of colleges and universities administering comparable projects, most tend to manage them via individual grant systems, like those at The University of Massachusetts, The University of Kansas, and the California Community College system. Graceland’s most critical mission, to prepare students intellectually, socially, and morally for a continuously changing world, requires an embrace of the dynamic, participatory modes of Open Education, this burgeoning social movement seeking to eradicate all institutional barriers to student access on the hallowed grounds of the academy. Corralling the best of emancipatory practices from across higher education, open education aims to animate new ways of teaching and learning, methods that boost the open sharing of knowledge and treat all students as meaningful actors and participants in the process.

**IT Contributions:** EDUCAUSE (2019b) issued a list of the top ten issues facing Higher Education. The list included:

1. Information Security Strategies/Privacy: IT departments are not being strategic in their approach to information security. In 2018 there were approximately 1244 data breaches affecting 446.52 million records (according to statista.com). With so many breaches occurring, IT departments need to develop strategies to combat digital security threat by safeguarding sensitive information.
2. Student Success: According to an article on CIO.com, the biggest risk facing IT departments is poor customer service. IT departments need to be willing to work across departments to help create the tools needed to drive student success.
3. Student-Centered Institution: Technology is a powerful tool that needs to be utilized to enhance a student’s success, and their overall experience. IT departments need to work with the university to make sure that the proper technology is in place so that the student experience is positive from applicants to alumni.
4. Digital Integrations: Many applications will be used throughout the university, and, while IT may need to be involved with each application, the right departments need to govern each application’s use. IT needs to work with departments to determine
what data needs to flow to and from various applications and the databases, but the applications themselves should be governed by the proper departments.

5. **Data-Enabled Institution:** Decisions should be data driven, so databases need to be kept clean. Universities should take great care to ensure that data and analytics are accurate, by ensuring the IT department has the proper skillset and training to keep the data clean.

6. **Data Management and Governance:** Universities should implement data-governance policies that reflect the needs of the university and organizational structure. According to bi-survey.com, 60% of respondents stated that the Finance Department governed data, and only 10% said that IT alone governed data.

7. **Higher Education Affordability:** Align institutional and IT priorities to ensure a sustainable future.

**Instructional Design Contributions:** The role of Instructional Design is to be the “architect” of the learning experience and, through the use of learning theory and ADDIE course development methodology, direct the instructional systems design (ISD) process which includes designing, developing, and delivering such things as online courses, instructional manuals, video tutorials, learning simulations, and more. “In short, instructional design is the process by which learning products and experiences are designed, developed, and delivered. These learning products include online courses, instructional manuals, video tutorials, learning simulations, etc. Instructional designers are the ‘architects’ of the learning experience and the ‘directors’ of the Instructional Systems Design ISD process. The terms instructional design, instructional technology, learning experience (LX) design, curriculum design, and instructional systems design (ISD), are sometimes used interchangeably.” (Instructional Design Central, n.d.).

Instructional designers work to make learning efficient by streamlining and structuring academic content in a way that allows the learner to easily access, retain, and apply the content, engaging to help the learner internalize the content, and they can impact the bottom line by creating dynamic courses that learners crave. (LaMotte)

**Emergent Technologies:** In the article *Ten Emerging Technologies for Higher Education*, Ahalt and Fecho (2015) discuss technologies that are being created that can help institutions stay on the forefront of student expectations while meeting the ever-changing regulation requirements. The following are a few of the items that were mentioned:

1. **Computerized Grading:** Quizzes can be easily auto graded through an LMS, but software is now becoming available that would simulate an instructor grading items such as essays and term papers.
2. **Flipped Classrooms:** Educators prepare materials (such as lectures and interactive lessons) that students must complete before class. The class time is then spent with hands on learning designed around the required content.
3. **MOOCs:** Massive Open Online Courses are free open courses available to anyone who wants to take them.
4. **Collaborative Distance Learning Environments:** These are designed to promote active learning across great distances by creating online community networks amongst students.
5. Active Learning Forum: The Active Learning Forum can utilize, “interactive discussions; real-time debate options; responsive gesture control to 3-D manipulation of digital objects; real-time simulations to demonstrate complex analyses; dynamic, collaborative document creation; dynamic polls and quizzes; live breakout sessions involving small groups of students and facilitated by the professor; and enhance office hours designed to provide individual students with up-to-date feedback on course performance and to track progress.”

Student-Centric System/LMS: In his article “LMS Operation and Governance: Taming the Beast,” Steve Foreman (2013) lays out five areas that can be addressed to maximize the efficiency of the Learning Management System.

- Standards: All users should be using the LMS in a consistent and standardized manner. Policies, procedures, guidelines, etc. should be created for these purposes, and should be unique to the needs of the institution.

- Taxonomy: The organization of the content in the LMS should be designed with the user in mind, with each area being laid out consistently to ensure ease of navigation.

- Configuration Management: All configuration settings, changes, modifications, etc. should be well documented for historical purposes. This will ensure that, when a personnel change occurs, remaining users will not be in the dark about what they did.

- Housekeeping: Data needs to be kept up to date in order to reflect the standards laid out by the institution. Inventory of data to clean up or purge should be taken, courses should be archived, users that need to be deactivated should be identified, and duplicate accounts should be merged.

- Governance: LMS Operations consists of four areas operations management (ensures the needs of the organization are being addressed, while also enforcing established standards, and LMS reliability), content owners (subject matter experts who develop the academic content and deliver it to the LMS administrators for the content in accordance with established standards), LMS administrators (responsible for the content configuration, responding to issues in a timely manner, and following established guidelines), technical support (“…consists of some combination of training, IT, and vendor staff. Technical support groups may include your helpdesk, eLearning content developers, developers of custom reports, server support, database and application managers, IT security, and network support. Together, these technical support groups are responsible for keeping the application up and running, resolving end-user issues, ensuring any eLearning programs are working properly, developing custom reports, managing any changes to the system configuration, installing patches and updates.”)
Technology Recommendations and Planning Considerations

Overall: The items mentioned in the 2018 STEEP report (such as data analytics, microcredentials, and active learning classrooms) continue to be important, and should be reviewed in conjunction with the new items in this document.

IT Contributions: Data integrity and security need to be a high priority for the university. With the increasing number of cyber-attacks, students, faculty, staff, and other users need to know that their information is as secure as possible. Databases need to be up to date, and IT staff need to have the hard skills needed to build and maintain a functional database system, and the soft skill needed to provide excellent customer service.

Instructional Design Contributions, Student Centric System, and LMS: In order to ensure a functional LMS system for our students, standards, taxonomy, configuration management, and housekeeping of the system need to take place. Students do not want to have to relearn how to navigate a course online with each new course. Instructional Designers have the knowledge of learning theory and techniques to ensure students have a consistent experience with in their online courses. By expanding the role of instructional design onto both campuses, students and instructors will have the resources they need to be successful with the learning management system.

Governance of the LMS needs to take place across the university, not reside in one department. A working group (to include faculty, IT, instructional design, and executive leadership) should be formed to determine the best division of responsibilities and permissions to ensure the needs of the student are being met.

Emerging Technologies: In an ever-changing technology-driven world, we are doing a disservice if we are not incorporating technology into the learning environment in every classroom. Students will be leaving the university and pursuing jobs that will require the use of technology; by utilizing technology in the classroom, they will be prepared to use it on the job.
Economic Issues

Overview: Changing demographics and increasing competitive pressures necessitate that higher education institutions engage in careful planning to become more efficient, fiscally responsible, and innovative than ever before.

Observations of Existing and Emerging Economic Issues:

Macroeconomic Factors That May Influence Higher Education

- Interest rates may affect student loan rates and raise the cost of attendance which could, in turn, impact demand. Interest rates on student loans, at both the undergraduate and graduate level, have fluctuated up and down over the last few years, but appear to be following a slow, but steady upward path over the past two years. Using data provided by ED Office of Federal Student Aid, 2019, we see the federal Stafford loan rate for undergraduate education at 5.05% for the period July 1, 2018-July 1, 2019. This is slightly higher than the 3.76% rate for the period two years earlier, but still lower than the 6.08% that was in effect from 2006-2008.
- The U.S. is experiencing a very long, but mild economic expansion characterized by low inflation and slow GDP growth. Although historically expansions have not persisted much longer than this, there is no inherent economic reason why this expansion is soon to end. As long as economic growth continues, unemployment, which was measured at 4.0% in January (Bureau of Labor Statistics, 2019), will remain low. The BLS (The Economics Daily, 2019) also reports that real wage and salary growth in the 12 months ending January 2019 was 1.7%.
- Inflation remains below 2%, meeting the Federal Reserve bank price stability target. Overall inflation, including all items, was measured at 1.6% for the period January 2018-January 2019. This same report shows a 2.9% increase in the category “College Tuition and Fees” and a 0.7% decrease in the category “College Textbooks” (BLS, 2019a).
- At Federal Reserve Bank Chair’s semiannual report to Congress on February 26, Jerome Powell reported “current economic conditions as healthy and the economic outlook as favorable”, but also described several challenges that could slow U.S. economic growth, including the slowing economic growth in Chinese and European economies and the persisting and potentially escalating trade tensions with China (Powell, 2019).

Public Policy’s Impact on Higher Education

- Student debt is at a record high and approximately one million people default on their college loans every year. (NY Times 2019). This has prompted President Trump to issue an Executive Order (https://www.whitehouse.gov/presidential-actions/executive-order-improving-free-inquiry-transparency-accountability-colleges-universities/) that will require institutions and the US Department of Education (ED) to track employment placement and earnings for each major.
- In 2018, President Trump and Education Secretary DeVos proposed several changes to financial assistance for students:
  - Consolidate income-based repayment plans into one, raising the monthly bill to 12.5% for both undergraduate and graduate students. The repayment
period would be reduced to 15 years for undergraduates, and lengthened to 30 years for graduates.
  o Discontinue loan forgiveness for public servants, such as teachers and social workers.
  o Expand Pell Grant eligibility to students pursing short-term certificates.
  o Freeze the maximum Pell Grant award to $5,920, regardless of inflation.

These changes have not yet been enacted (Douglas-Gabriel, 2018).
- DeVos has also proposed a plan to simplify restrictions on universities for things like alternative education, credit hours, and accreditation, in an effort to “unleash innovation” (Camera, 2019).
- An audit of the Federal Student Aid (FSA) found that they were not always holding loan servicers accountable for not complying with requirements, and they were not tracking all identified instances of noncompliance. They also found that the FSA did not always have all of the information required to ensure servicer compliance. The FSA is making efforts to improve their oversight of servicers (Department of Education, Office of Inspector General, 2019).
- Enrollment of new international students is still declining, but at a lesser rate. In 2017-18, the decline was 6.6% from the year before, while in 2018-19 it was only 1.5% from the year before. The number of students coming from China, the largest country of origin for international students, is still slightly increasing, while the next three countries (India, South Korea, and Saudi Arabia) are still declining. Rates of enrollment from Mexico and Canada are also declining (Redden, 2018).

**Economic Impacts of Changing Demographics**
- At Graceland, a diversity factor that all students immediately experience is that classmates are more likely to come from another state or country than from Iowa or Missouri. According to Graceland’s 2018-19 Fact Book, more Graceland students are from out of state than from Iowa or Missouri. This is true of graduate and undergraduate students on both campuses; breakdowns are provided in Figure 1 in the Appendix.
- Because STEEP research has indicated that both face-to-face and online students prefer to study within 100 miles of their home, Enrollment Management has established goals and implemented strategies to recruit more students from within a 150 mile radius of the Lamoni Campus and within the greater Kansas City area. This is a challenging goal given that the population of high school students in the Midwest is projected to decline by as much as 5% between 2013 and 2020, according to the Western Interstate Commission for Higher Education (WICHE, 2017). WICHE data also provides evidence that while the Midwest population is declining, its diversity is increasing. See Figures 2 and 3 in the Appendix.

**Diversity and Income Level**
- Given the population change and the fact that Graceland is committed to inclusivity, it is no surprise that Graceland’s racial/ethnic diversity increased by 11% between 2011 and 2018 (Fact Book). See Figure 4 in the Appendix.
• The Fact Book also demonstrates that the number of students who are eligible for federal pell grants (financial college support for low-income families) is gradually but steadily increasing. This means that more of our students are from low-income families. See Figure 5 in the Appendix.

• Graceland ranks in the top half of Iowa private schools with regard to the amount of federal Pell Grant funds that it awards. See Figure 6 in the Appendix.

• Iowa offers a grant to low income students, the Iowa Tuition Grant (ITG). Iowa has provided an average $46M each year in grant aid to thousands of students. Both total appropriations and average award amounts have steadily increased since 2011-12. In 2016-17, the maximum grant award amount was $5,650 and 10,619 grants were awarded with an average amount of $4,609. The award maximum will be $6,000 for 2019-20 and eligibility requirements have expanded to include more beneficiaries. (Iowa Association of Colleges and Universities, 2019).

• Research indicates that students who receive TGs are more likely to succeed than students who do not. According to the Iowa College Aid Commission (Bolton, 2018b) 76% of ITG grant recipients graduated within 6 years from one of Iowa’s private institutions and grant recipients are more likely to graduate than other groups of students. Graceland’s six-year graduation rate, at 71%, falls near the top of the lowest quartile of Iowa private colleges. See Figure 7 in the Appendix.

• In Iowa, 57% of Pell recipients graduated from the state’s four-year institutions within six years, compared with 75% for non-Pell students. Forty percent of Iowa’s K-12 students this year are from low-income families, Iowa DOE data shows. Nationally, that number is greater than fifty percent (Bolton, 2018a).

**Economic Outcomes of Graduates**

• Between 2013 and 2015 in Iowa, those with a bachelor's degree earned an average $60K annually, compared with an average income of $35K for those with a HS diploma. That gap widens with more advanced education, so it is important for Graceland to honor its commitment to providing transformational learning experiences by recruiting and supporting students in our home state. See Figure 8 in the Appendix.

• Of the more than 15.6M jobs expected to be added in the US by 2022, more than 70% will require a bachelor's degree or higher, (Bureau of Labor Statistics) and the Future Ready Iowa initiative aims to ensure 70% of Iowa’s workers have training or education beyond high school by 2025. To reach that goal, a higher percentage of Iowa’s low-income college students must obtain certificates and degrees (Bolton, 2018a).

• To support Iowa’s intention, criteria for Iowa Tuition Grant eligibility has been expanded to enable more students to benefit from the grant, which has also been increased to a maximum of $6,000 per year, per student. (Iowa Association of Colleges and Universities, 2019). Graceland’s office of Student Financial Services has notified qualified students of the increased amount and new opportunities.
National Labor Market Trends

The following are excerpts from the National Association of Colleges and Employers Environmental Scan 2017-18 (NACE, 2017):

- “There will be 6.8 million entry-level job openings from growth or replacement in occupations requiring a bachelor’s degree and no experience.”
- “The following occupations requiring a bachelor’s degree with no experience are projected to be the fastest growing over the next 7 years: Operations research analysts, Personal financial advisors, Cartographers, Interpreters and translators, Forensic science technicians.”
- “The following occupations requiring a bachelor's degree with no experience are projected to have the most total job openings from both replacement and growth: Elementary and secondary teachers, Registered nurses, Accountants and auditors, Software developers and analysts, Market research analysts, Human resource specialists.”
- “Occupations in which demand is expected to exceed the supply of graduates in the “relevant” major include: Computer science, Operations research engineering, Environmental engineering, Education, Industrial engineering, Human resources, Accounting, Nursing.”
- “Occupations in which the supply of “relevant” graduates is expected to exceed demand include: Chemical engineers, Electrical engineers, Biomedical engineers, MIS, Mechanical engineers, Finance.”

See Figure 9 in the Appendix for the majors in highest demand, according to NACE’s Spring Job Market Outlook.

Economic Recommendations and Planning Considerations

Despite the current regional and national economic climate characterized by a sustained period low unemployment and real wage growth, enrollment challenges persist due to changing demographics and competitive pressures of the higher education market. Graceland needs to be proactive and nimble in responding to these pressures.

1. Invest in Lamoni & Independence Campus Programs and Facilities

Maintaining regional competitiveness requires demonstrating the value of a residential liberal arts education in terms that appeal to prospective students and young adults, Graceland needs to maintain its quality of offerings, instruction, and facilities, while at the same time clearly articulating Graceland’s distinctiveness. Appealing to these prospective students will necessitate new and innovative academic and co-curricular programming, reinvesting in areas of strength, and providing adequate funding for marketing to grow programs.
2. Grow current programs and create new programs that are leading to strong labor market outcomes.
Knowing that students and their families are more concerned than ever before about whether their degrees will help them find strong jobs, labor market data and other resources should be used to identify which programs will best serve students of the future, and or how to adapt programs or begin new programs relevant to student needs.

3. Create offerings for expanding student populations
A. Create new programming and increase marketing of existing programming aimed at adult learners, while leveraging connections with SkillPath to better access and serve potential students.
B. Given the decrease in the number of graduating high school students in the Midwest, consider expanding the international student population. Graceland might identify countries with expanding numbers of students seeking education in the U.S. and increase marketing in those areas, e.g., China.
C. Understanding the trend towards more under-resourced students seeking a private college education, Graceland could become a leader in serving this growing population.
D. Because of the aging U.S population, demand for healthcare services is rising. Build on our market strength in the School of Nursing to deliver other educational products that will be in increasingly high demand.

4. Assess budget impacts of cost-cutting measures
Many changes have been made in recent years to improve the operating budget and to proactively reduce the university’s dependence on SkillPath funding. Just as faculty assess learning, as an institution we should regularly assess the effectiveness of these major changes in improving the university’s bottom line, including evaluation of the impacts on both cost and revenue.

5. Prepare financially for the next economic downturn
The current macroeconomic climate is positive, but every expansion is followed by an eventual economic slowdown. In 2008, the financial crisis impacted U.S. colleges and universities, affecting enrollments and endowments, including Graceland. To be prepared, Graceland should continue to be prudent in financial decision-making, balancing the need to invest SkillPath dollars in new programs and facilities against the need to increase endowment and reserves. It is the reserves that will allow Graceland to sustain a drop in revenue during the next downturn.

In addition, Graceland should seek to raise Lamoni campus enrollment in order to provide a buffer for the next economic recession. Continuing to recruit more Iowa and Missouri students and supporting student success and retention efforts will be an important aspect of raising the enrollment levels and increasing graduation rates.

In addition to immediate budget impacts, declining enrollments may present new retention and recruiting challenges if the vibrancy of the campus is affected by smaller numbers. Therefore, efforts to increase the number of students on campus, even those that appear budget-neutral, may have long term benefits in creating this margin of safety.
Environmental Issues

It is important to acknowledge and plan strategically for the potential impact of environmental threats on Graceland. Graceland is already experiencing the impact of severe weather. The summer/fall 2017 storm season—particularly the flooding in Houston and the hurricane in Puerto Rico—disrupted enrollment and performance of students from those areas. In addition, the unusually harsh winter of 2019 underscored the importance of planning and readiness for all manner of extreme weather events. Climate change and extreme weather events will continue to affect our ability to attract and retain students, particularly those from areas that are most vulnerable to its worst effects, such as Florida, Texas, and California. The sooner we acknowledge and begin planning for climate change, the more resilient we will be as an institution. And while climate change and other environmental crises certainly threaten our long-term stability as an institution, there are also vital opportunities embedded in the landscape. To make the most of those opportunities, we’ll need to create the conditions for creative and collaborative thinking, clear communication, and innovative strategic planning.

Observations of Existing and Emerging Environmental Issues:

Environmental Threats:

- **Changing Landscape of Global Environmental Risks**: According to the World Economic Forum’s 2019 “Global Risks Report,” five of the top ten global risks (in terms of both likelihood and impact) were environmental risks: extreme weather events, failure of climate-change mitigation and adaptation, natural disasters, man-made environmental disasters, and biodiversity loss and ecosystem collapse (see figure 1, below). Two other risks listed among the ten most urgent and important—“large-scale involuntary migration” and “water crises”—are also arguably “environmental” and are meaningfully connected to those five environmental risks. The report’s authors are not optimistic about the prospects for meaningful action to address these risks: “Global risks are intensifying but the collective will to tackle them appears to be lacking. Instead, divisions are hardening.” See Figure 10 in the Appendix.

- **More Severe Storms**: While it’s impossible to link climate change to any one devastating storm, NASA’s “Earth Observatory” project suggests that the rise in global temperatures will contribute to a general rise in frequency, severity, and cost of storms across the world.

- **More “Extreme Heat”**: Most climate prediction models suggest that we will see more “extreme heat” days and heat waves in the years ahead, and that we’ll experience extreme heat later in the summer season (Luber & McGeehin, 2008).

- **Environmental Migrations**: The United Nations Refugee Agency predicts that forced migrations related to climate change and other environmental crises will exacerbate the global refugee crisis in the next decade.

- **Depletion of Water Resources**: Although the Midwest has not suffered the same level of drought as Western states, the prospect of long-term water shortage is very
real in southern Iowa and threatens the agricultural economy (Kolbert, 2014).

- **Loss of Species Diversity**: Most environmental scientists believe that we will continue to experience massive losses to biodiversity in the coming years (Kolbert, 2014). In addition, the past decade has seen the proliferation of dangerous invasive species in Iowa (Emerald Ash Borer, Asian Carp). Graceland needs to support regional efforts to protect critical habitat and restore native species and traditional ecosystems (tallgrass prairie, oak savannah).

- **Political Polarization of Environmental Issues**: Discussion of environmental issues in the U.S. is increasingly politically and culturally polarized, a trend that shows no sign of abating (Dunlap and McCright, 2009).

**Environmental Opportunities**:

- **Movements for Small Farms and Local Food**: Interest among young people in small-scale farming and homesteading, a revived local foods movement growth of farmers markets, backyard gardening and livestock farming, and farm-to-table restaurants (Jacobsen, 2015) are a natural fit with Graceland’s environment.

- **Shifting Energy Portfolios**: Other states and countries are shifting away from fossil fuels and toward renewable energy to lower costs and pollution. Researchers have argued that Iowa (and the Midwest more broadly) could reach a goal of 100% renewable energy by 2050 (Jacobsen, 2015).

- **Growing “Green Economy”**: Economists predict a continually improving outlook for jobs that provide goods or services that benefit the environment, such as jobs in the renewable energy sector or in the recycling and waste management industries (Muro et al., 2016).

- **Waste Reduction and Efficiency**: The cost of solid waste disposal has steadily risen in recent years, and rising energy and material costs have driven innovations in the efficient use of resources (such as reduction, reuse, recycling, and repair) (Jacobsen, 2015).

- **Do Students Prefer Urban Campuses?** While some higher education researchers argue that data indicate that students prefer urban campuses (Lieberman, 2017), others argue that the current generation’s preference for cities has been exaggerated (Casselman, 2016).

**Environmental Recommendations and Planning Considerations**

Environmental resilience is required; every decision and every investment of resources provides an opportunity to become *more prepared* for environmental challenges. Graceland has resources to draw on to meet those challenges: collaborative programs with Sodexo, a hoop house, alumni with connections to the green economy, faculty with
expertise in various disciplinary approaches to sustainability, and students with innovative ideas and a commitment to social change.

1. **Acknowledge, Plan, and Act**
The first step toward a more stable environmental future is to communicate openly across all sectors of the university about what environmental change could mean for the future of the institution and to link those conversations to the institution’s decision-making processes. Then, we can begin to find ways to take small and large actions to make the institution more resilient to environmental change. For example, the university could take steps toward improving energy efficiency, managing rainwater in anticipation of increased frequency of storms, ensuring HVAC systems can handle extreme heat and humidity, and setting targets for waste reduction.

2. **Leverage Resources & Alumni Connections to the Green Economy**
Graceland has a number of resources that it can draw upon to help meet the challenges and opportunities of climate change. Engaged alumni, with connections to the green economy, could provide significant opportunities for new programs and investment. Faculty, staff, and students with expertise and commitment to sustainability can become champions for new initiatives and programming that will enhance Graceland’s position in this growing field.

3. **Develop Relevant Curriculum and Programming**
Future graduates will face environmental crises that exceed the capacity of our current imagination. It is important for Graceland to develop curriculum that prepares students to act wisely, creatively, and compassionately in a changing landscape. We have the opportunity to create innovative interdisciplinary programming and curriculum that meets the challenges and opportunities of an economy confronted with climate change. For example, several colleges and universities offer programs—such as University of Oregon’s Sustainable Cities Initiative and University of Iowa’s Initiative for Sustainable Communities—that bring together students, local businesses, city employees, and community members for hands-on sustainability projects, such as improvements to local bike infrastructure, local composting programs, and community education initiatives.

4. **Connect to the Environmental Attitudes of Generation Z**
While broad claims about the attitudes of an entire generation can be misleading, several surveys done by reputable polling firms suggest that members of Generation Z (those born between the late 1990s and early 2000s) are more concerned with environmental issues, more attentive to sustainability in their consumer choices, and more interested in careers that focus on sustainability than previous generations. A 2018 Pew survey found that Gen Z and the Millennials were the most likely to agree that human activity is responsible for climate change—54% and 56% of respondents, respectively (Parker, et al, 2019). In addition, a 2015 Nielsen survey of that Gen. Z were more willing to pay a premium for “sustainable” products (73% of Gen. Z respondents versus 66% of the general population). Finally, the 2016 Masdar Gen Z Global Sustainability Survey—the “first-ever survey of post-millenial attitudes towards sustainable development, renewable energy and climate change”—found that 43% of Gen Z respondents in the developed world were interested in studying or working in a field related to sustainability in the future (Masdar, 2016).
5. **Make Environmental Weaknesses into Strengths**

A rural campus offers a beautiful pastoral landscape, unique experiences in gardening and practical landscaping, and safe outdoor recreational opportunities. A small campus means that students have much more power to make meaningful and lasting change. Graceland is surrounded by underserved communities that also need to prepare for a sustainable future. The university is positioned to make a significant difference in the region. Graceland could develop micro-targeted recruitment strategies to reach high school students with demonstrated interest in environmental and sustainability issues. In addition, community sustainability projects could be a component of the university’s retention efforts. The retention rate for college students involved in community projects is typically higher than average (Salvador, 2017), and projects related to Graceland’s unique environment could serve those larger goals.
Political Issues

Overview: Political issues are expected to become increasingly dynamic and intense related to higher education in the coming years. Access to funds has already decreased and is expected to continue for the foreseeable future. Maintaining faculty, staff, and administrators during these times will require innovative thinking and creativity to stay ahead of the competition for other global educational communities that are suddenly within reach. A lot of uncertainty is anticipated in this sector.

Observations of Existing and Emerging Political Issues:

Department of Education Considering Major Regulation Changes
The U.S. Department of Education, led by Betsy Devos, is examining a number of changes to existing regulation within higher education. The overall goal within the new administration is to have the federal government “exercise as little control as possible over the nation’s schools” and “encourage innovation” within the industry (Meckler, 2018).

The many changes being considered include:

- Revocation of guidelines on affirmative action and transgender students (Meckler, 2018)
- Modification to guidance regarding racial bias in school discipline (Meckler, 2018)
- Elimination of the ‘Gainful Employment Rule’ for certain programs and certificates (Meckler, 2018)
- Simplification of the Department’s process for recognition and review of accrediting agencies (Kamenetz, 2018)
- Elimination/modification to federal definition of the ‘Credit Hour’ (Kamenetz, 2018)
- Elimination/modification to the federal requirement for students to have ‘regular and substantive interaction’ with faculty in their courses (Kamenetz, 2018)
- Modification to rules that prohibit education funding to faith based entities (Kamenetz, 2018).
- Elimination of a restriction that universities cannot outsource “more than 50% of an academic program to a separate provider that’s not eligible for federal aid” (Camera, 2019)
- Elimination of a regulation that new accrediting agencies must prove at least 2 years of relevant experience before receiving federal recognition (Camera, 2019)
- Modification to limit the number of accreditation reviews a university must undergo when attempting to offer new academic programs (Camera, 2019)
- Elimination of Public Service Loan Forgiveness (PSLF) plan of specific programs; affecting educational financial debt for faculty and students (Douglas-Gabriel, 2018)

Iowa Bill 3179 – Open Education Resources (Postsecondary Institutions)
The Iowa Senate is currently studying Bill 3179 that would begin to define requirements for use and disclosure of Open Education Resources (OER) at postsecondary institutions within the state. Open Education Resources are defined as “materials used to support education that are in the public domain or are under an open license and that may be freely accessed” (Iowa Legislature, 2019). Under the proposed bill, all postsecondary institutions receiving financial aid for students would need to (1) submit an annual report
regarding the number of minority students and minority faculty members employed at the institution, (2) identify in the institution’s course catalog the individual courses that will use open education resources, and (3) develop and implement a 5-year plan to increase the number of courses utilizing open education resources throughout the institution (Iowa Legislature, 2019). Iowa Bill 3179 reflects a growing trend towards OER use in courses and programs throughout the country. Graceland University should continue to monitor this trend and evaluate potential feasibility within the institution.

**Missouri Bill 225-Workforce Grant (Scholarship First Degree)**
The Missouri House Bill 225 provides a first time scholarship for first degree seeking for Missouri Citizens and approved to appropriate money by the general assembly for this program is used to provide grants for Missouri citizens to attend an approved Missouri postsecondary educational institution of their choice in accordance with the provisions set within the bill. Refer to MO House Bill 225 for further details (Missouri House Legislature, 2019).

**Update: Community Colleges to Offer Baccalaureate Degrees**
Prior to his resignation in June 2018, Governor Greitens signed HB 1465 in law, which grants community colleges the ability to offer 4-year degrees within the State of Missouri (Ruch, 2018). A recent scan (Spring of 2018) of large community college institutions within the state shows that no system has implemented a 4-year degree offering to date. Missouri’s action follows a larger trend within the United States, where other 18 states allow community colleges to offer 4-year degrees (Povich, 2018, see also Figure 11 in the Appendix).

**Political Party Affiliation Influencing Perceptions of Higher Education**
Recent surveys by the Pew Research Center, Gallup and New America are highlighting a growing perception problem related to higher education in the United States. While the Pew and Gallup surveys showed clear distinctions along party lines, the New America survey shows a more nuanced view. According to the Gallup survey, 67% of Republicans have “some” or “very little confidence” in colleges and universities (Busteed 2017). The Pew survey shows that 58% of Republicans say that colleges and universities “have a negative effect on the way things are going in the country” (Busteed 2017). Among conservatives, 79% were concerned about “professors introducing political and social views in the classroom” (Pettit 2018). Democrats also expressed concern about higher education, but for different reasons. Among progressives, 92% cited the high cost of higher education as a major concern (Pettit 2018). Funding for higher education is another area of distinction among political party affiliation. When asked whether the ‘government funding should be provided for higher education because it is good for society’, 76% of Democrats agreed or somewhat agreed. Among conservatives, 36% supported government funding for higher education because it is good for society (See Figure 12 in the Appendix).
**Political Recommendations and Planning Considerations**

1. **Monitor and Respond to Pending Changes from the Department of Education**
   Graceland should continue to monitor and respond to potentially sweeping changes within the U.S. Department of Education. Implementation of these changes could have significant implications for accreditation, online learning, for-profit & non-profit institutions, and the entire higher education industry. One specifically is student loan debt accumulated in pursuing higher education when the Public Service Loan Forgiveness (PSLF) may no longer be offered.

2. **Explore Regulation Implications of Open Education Resources (OER)**
   Graceland should continue to monitor and evaluate the national trend towards making course materials more affordable for students. As state governments begin to implement requirements related to Open Education Resources, the institution should respond and develop a long-term plan to meet this challenge. A collaborative effort among academic units, bookstore staff personnel, and student representatives is recommended.

3. **Adapt to Dynamic Changes in Community Colleges**
   During this time of dynamic change, Graceland should continue to follow political developments at the local, state, and national levels. Currently 18 states allow community colleges to offer 4-year degrees. This will continue to put pressure on private institutions as students (and their families) continue to seek the best value for their choice of college. Missouri’s recent law may have considerable impact on Graceland. The public community college system in Missouri is well respected and could present a formidable challenge for recruiting in the coming years. For this reason, potential partnerships with the local community colleges, including bridge-to-master’s level programs should be explored.

4. **Respond to Current Perception Issues Regarding Higher Education**
   Graceland University has an opportunity to respond to current perception issues with higher education by leveraging existing affiliations, promoting community dialogue and conveying of overall value of higher education. For example, the ‘Better Angels’ program, which has been effective on the Lamoni Campus, can be leveraged and proactively engaged to help address the potential perception of political bias within college campuses. Graceland should also actively seek ways to promote the value of educational experience and higher education in general.
Conclusion

This research report from the Graceland Innovation Committee identifies and discusses key trends from the past year (2018-19) that influence the Social, Technological, Economic, Environmental and Political framework of the higher education industry – and that inevitably impact Graceland University:

- **Social Trends**
  - Generation Z & Y -- these students are generally more technologically-savvy, they are diverse and more likely to enter college underprepared, there are fewer of them (especially in the Midwest region), and they are more likely to come from low-income households

- **Technology Trends**
  - Key technology developments include active learning, encryption, mobile learning, infrastructure and emerging technologies, integrated planning and advising for student success (iPASS), microcredentials, online education, and learning analytics

- **Economic Trends**
  - While the current state of the economy is robust, changes in demographics, social trends and public policy represent a fundamental challenge for institutions within higher education. The need for strategic investment in new & innovative programs and services, to meet the changing market, is vital for future success.

- **Environmental Trends**
  - While there are observable patterns of climate change that may represent a threat to the institution, there are also opportunities, such as movements toward small farms/local food, shifting energy portfolios, engaging in the ‘green economy’, and waste reduction & efficiency

- **Political Trends**
  - In the state of Missouri, the recent law authorizing community colleges to offer baccalaureate degrees could have significant impacts for Graceland. In addition, proposed DOE changes at the national level could have sweeping impacts on the higher education industry.

Findings from the environmental scan discussed within this report should form part of the foundation for future discussion and investigation into these oncoming trends and issues. The Innovation Committee’s goal is to create general awareness of changes that may impact Graceland University and the Higher Education industry.
References


Lieberman, M. (2017, September 27). How colleges should rethink their strategic planning


Appendix

Figure 1:

All Campuses Undergraduate Enrollment
Fall 2017 by US Census Region

All Campuses Graduate Enrollment
Fall 2017 by US Census Region

Figure 2:

Significant Regional Variation
Total Public and Private High School Graduates, 2000-01 to 2031-32

State Variation in Percent Change of High School Graduates, 2013-2020

Figure 3:

Midwestern Region High School Graduates
### Figure 4:
**Lamoni Campus – Student Diversity Trends**

<table>
<thead>
<tr>
<th>Year</th>
<th>Race/Ethnic Diversity*</th>
<th>White</th>
<th>Non-U.S. Citizens</th>
<th>Unknown</th>
<th>Total Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td>239 (26%)</td>
<td>525</td>
<td>120</td>
<td>52</td>
<td>936</td>
</tr>
<tr>
<td>2012-13</td>
<td>245 (26%)</td>
<td>559</td>
<td>104</td>
<td>43</td>
<td>951</td>
</tr>
<tr>
<td>2013-14</td>
<td>286 (27%)</td>
<td>630</td>
<td>101</td>
<td>41</td>
<td>1058</td>
</tr>
<tr>
<td>2014-15</td>
<td>289 (27%)</td>
<td>630</td>
<td>88</td>
<td>45</td>
<td>1052</td>
</tr>
<tr>
<td>2015-16</td>
<td>318 (31%)</td>
<td>582</td>
<td>71</td>
<td>55</td>
<td>1026</td>
</tr>
<tr>
<td>2016-17</td>
<td>321 (33%)</td>
<td>557</td>
<td>32</td>
<td>50</td>
<td>960</td>
</tr>
<tr>
<td>2017-18</td>
<td>338 (37%)</td>
<td>531</td>
<td>27</td>
<td>31</td>
<td>927</td>
</tr>
</tbody>
</table>

*Students who self-identify as African American, Hispanic, Asian, Pacific Islander, Native American or multiracial. Includes: full- and part-time.

### Figure 5:
**Graceland University PELL Recipients**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>First-time Freshmen</td>
<td># Students</td>
<td>140</td>
<td>137</td>
<td>156</td>
<td>171</td>
</tr>
<tr>
<td>Percent</td>
<td>55%</td>
<td>54%</td>
<td>54%</td>
<td>61%</td>
<td>51%</td>
</tr>
<tr>
<td>All Undergraduate</td>
<td># Students</td>
<td>573</td>
<td>598</td>
<td>644</td>
<td>663</td>
</tr>
<tr>
<td>Percent</td>
<td>41%</td>
<td>41%</td>
<td>42%</td>
<td>42%</td>
<td>43%</td>
</tr>
</tbody>
</table>

### Figure 6:
**Iowa schools receive millions from federal Pell Grants**

More than $655 million in federal student aid for students from low-income families flowed into 27 Iowa public and private four-year colleges and universities between 2010 and 2016.

- Iowa State University, Ames
- University of Iowa, Iowa City
- University of Northern Iowa, Cedar Falls
- Upper Iowa University, Fayette
- Buena Vista University, Storm Lake
- William Penn University, Oskaloosa
- University of Dubuque, Dubuque
- Grand View University, Des Moines
- Saint Ambrose University, Davenport
- Graceland University, Lamoni
- Drake University, Des Moines
- Simpson College, Indianola
- Morningside College, Sioux City
- Luther College, Decorah
- Briar Cliff University, Sioux City
- Wartburg College, Waverly
- Grinnell College, Grinnell
- Coe College, Cedar Rapids
- Cornell College, Mount Vernon
- Central College, Pella
- Mount Mercy University, Cedar Rapids
- Dordt College, Sioux Center
- Clarke University, Dubuque
- Northwestern College, Orange City
- Loras College, Dubuque
- Iowa Wesleyan University, Mount Pleasant

* Maharishi University of Management, Fairfield

USA TODAY NETWORK GRAPHIC | SOURCE: U.S. DEPARTMENT OF EDUCATION, FEDERAL STUDENT AID | * INCLUDES THREE YEARS OF DATA.
Figure 7:
Graduation rates of Iowa grant recipients

Three-fourths of Iowa Tuition Grant recipients graduate within six years, but those rates vary greatly among colleges.*

<table>
<thead>
<tr>
<th>Institution</th>
<th>Graduation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northwestern College, Orange City</td>
<td>87%</td>
</tr>
<tr>
<td>Central College, Pella</td>
<td>86%</td>
</tr>
<tr>
<td>Mount Mercy University, Cedar Rapids</td>
<td>84%</td>
</tr>
<tr>
<td>Luther College, Decorah</td>
<td>84%</td>
</tr>
<tr>
<td>Cornell College, Mount Vernon</td>
<td>84%</td>
</tr>
<tr>
<td>Simpson College, Indiana</td>
<td>83%</td>
</tr>
<tr>
<td>Saint Ambrose University, Davenport</td>
<td>82%</td>
</tr>
<tr>
<td>Wartburg College, Waverly</td>
<td>81%</td>
</tr>
<tr>
<td>Loras College, Dubuque</td>
<td>81%</td>
</tr>
<tr>
<td>Drake University, Des Moines</td>
<td>79%</td>
</tr>
<tr>
<td>Dordt College, Sioux Center</td>
<td>79%</td>
</tr>
<tr>
<td>Clarke University, Dubuque</td>
<td>73%</td>
</tr>
<tr>
<td>Morningside College, Sioux City</td>
<td>71%</td>
</tr>
<tr>
<td>Buena Vista University, Storm Lake</td>
<td>71%</td>
</tr>
<tr>
<td>Graceland University, Lamoni</td>
<td>68%</td>
</tr>
<tr>
<td>University of Dubuque, Dubuque</td>
<td>66%</td>
</tr>
<tr>
<td>Upper Iowa University, Fayette</td>
<td>66%</td>
</tr>
<tr>
<td>Grand View University, Des Moines</td>
<td>46%</td>
</tr>
<tr>
<td>William Penn University, Oskaloosa</td>
<td>35%</td>
</tr>
<tr>
<td>Briar Cliff University, Sioux City</td>
<td></td>
</tr>
<tr>
<td><strong>OVERALL RATE</strong></td>
<td><strong>76%</strong></td>
</tr>
</tbody>
</table>

6-YEAR GRADUATION RATES OF IOWA GRANT RECIPIENTS FOR ALL PRIVATE IOWA COLLEGES AND INSTITUTIONS

- Entering fall 2007 class: 76%
- Entering fall 2008 class: 77%
- Entering fall 2009 class: 75%
- Entering fall 2010 class: 77%
- Entering fall 2011 class: 77%

USA TODAY NETWORK GRAPHIC | SOURCE: IOWA COLLEGE AID, ANALYSIS OF FALL 2007-11 ENROLLEES
* MERCY COLLEGE OF HEALTH SCIENCES, MAHARISHI UNIVERSITY OF MANAGEMENT, IOWA WESLEYAN UNIVERSITY, GRINNELL COLLEGE AND COE COLLEGE HAD FEWER THAN 10 STUDENTS INCLUDED IN EITHER THE GRADUATE OR NON-GRADUATE PROPORTION.
Six-year graduation rate of Pell vs. non-Pell students in Iowa

College students who receive the federal Pell Grant — provided to students from low-income families — are less likely to graduate than their peers.*

<table>
<thead>
<tr>
<th>Institution</th>
<th>Pell Grant recipients graduating within 6 years*</th>
<th>Non-Pell Grant students graduating within 6 years*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa Wesleyan University, Mount Pleasant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Iowa University, Fayette</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graceland University, Lamoni</td>
<td></td>
<td></td>
</tr>
<tr>
<td>William Penn University, Oskaloosa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Dubuque, Dubuque</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Briar Cliff University, Sioux City</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buena Vista University, Storm Lake</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand View University, Des Moines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morningside College, Sioux City</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saint Ambrose University, Davenport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simpson College, Indianola</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maharishi University of Management, Fairfield</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northwestern College, Orange City</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mount Mercy University, Cedar Rapids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central College, Pella</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Northern Iowa, Cedar Falls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STATEWIDE AVERAGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Iowa, Iowa City</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wartburg College, Waverly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coe College, Cedar Rapids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loras College, Dubuque</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clarke University, Dubuque</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iowa State University, Ames</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dordt College, Sioux Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luther College, Decorah</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grinnell College, Grinnell</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drake University, Des Moines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cornell College, Mount Vernon</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* ENTERING CLASS OF FALL 2010 FIRST-TIME, FULL-TIME STUDENTS WHO GRADUATED BY SPRING 2015.
<table>
<thead>
<tr>
<th>ACADEMIC DISCIPLINE</th>
<th>PERCENTAGE OF TOTAL RESPONDENTS HIRING DISCIPLINE</th>
<th>AVERAGE PERCENTAGE OF TOTAL NEW RECRUITS WITHIN DISCIPLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>75.9%</td>
<td>53.1%</td>
</tr>
<tr>
<td>Business</td>
<td>72.3%</td>
<td>30.3%</td>
</tr>
<tr>
<td>Computer Sciences</td>
<td>64.3%</td>
<td>23.0%</td>
</tr>
<tr>
<td>Accounting</td>
<td>57.1%</td>
<td>17.1%</td>
</tr>
<tr>
<td>Economics</td>
<td>28.6%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Misc. Majors</td>
<td>21.4%</td>
<td>18.0%</td>
</tr>
<tr>
<td>Physical Sciences</td>
<td>20.5%</td>
<td>13.4%</td>
</tr>
<tr>
<td>Communications</td>
<td>17.9%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>14.3%</td>
<td>11.6%</td>
</tr>
<tr>
<td>Humanities</td>
<td>11.6%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>4.5%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Education</td>
<td>1.8%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>1.8%</td>
<td>14.0%</td>
</tr>
</tbody>
</table>
Figure 10: The Global Risks Landscape 2019

Top 10 risks in terms of Likelihood
- Extreme weather events
- Failure of climate-change mitigation and adaptation
- Natural disasters
- Data fraud or theft
- Cyber-attacks
- Man-made environmental disasters
- Large-scale involuntary migration
- Biodiversity loss and ecosystem collapse
- Water crises
- Asset bubbles in a major economy

Top 10 risks in terms of Impact
- Weapons of mass destruction
- Failure of climate-change mitigation and adaptation
- Extreme weather events
- Water crises
- Natural disasters
- Biodiversity loss and ecosystem collapse
- Cyber-attacks
- Critical information infrastructure breakdown
- Man-made environmental disasters
- Spread of infectious diseases

Categories
- Economic
- Environmental
- Geopolitical
- Societal
- Technological

Note: Survey respondents were asked to assess the likelihood of the individual global risk on a scale of 1 to 5, 1 representing a risk that is very unlikely to happen and 5 a risk that is very likely to occur. They also assess the impact on each global risk on a scale of 1 to 5: 1: minimal impact, 2: minor impact, 3: moderate impact, 4: severe impact and 5: catastrophic impact). See Appendix B for more details. To ensure legibility, the names of the global risks are abbreviated; see Appendix A for the full name and description.
Figure 11:

Two-Year Colleges Giving Four-Year Degrees
In more than a third of U.S. states, two-year colleges are granting bachelor’s degrees.

*Ohio authorized two-year colleges to confer bachelor’s degree in 2018.
Source: Community College Baccalaureate Association
© 2018 The Pew Charitable Trusts

Figure 12:

Which of the following statements is closer to your point of view regarding funding for higher education?

“The government should fund higher education because it is good for society.”
“Students should fund their own education because it is a personal benefit.”

<table>
<thead>
<tr>
<th>Statement</th>
<th>Total</th>
<th>Democrats</th>
<th>Independents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government should fund (strongly agree)</td>
<td>46%</td>
<td>62%</td>
<td>44%</td>
</tr>
<tr>
<td>Government should fund (somewhat agree)</td>
<td>13%</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>Neither know</td>
<td>13%</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>Government should fund (somewhat agree)</td>
<td>9%</td>
<td>11%</td>
<td>8%</td>
</tr>
<tr>
<td>Students should fund (strongly agree)</td>
<td>18%</td>
<td>7%</td>
<td>18%</td>
</tr>
</tbody>
</table>

Source: New America, "Varying Degrees 2018."