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The Five Essential Building Blocks to Becoming a Top Twenty-Five Supply Chain Program.

by

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An Honors Thesis in partial fulfillment of the requirements for the degree Bachelor of Science in Business Administration in Supply Chain Management and Marketing.

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The Five Essential Building Blocks to Becoming a Top Twenty-Five Supply Chain Program:

Introduction

The Supply Chain Management sector has grown substantially in the last fifteen to twenty years; the current placement rate of undergraduates is eighty-five to one hundred percent after graduation (Damast, 2015). This phenomenon correlates with international and domestic interest in information technology, economic dynamics, flexibility, and product availability, all of which have grown industry demand (Rob O'Byrne, 2020). In the last twenty years, multiple universities have transformed programs within their business colleges into supply chain management departments. Many of them were formerly logistics, management, or engineering focused. However, once they began developing students, the results seemed to be automatic in the sense of long-term success within this practice. For example, one university began specifically with a logistics engineering focus producing top-notch students for the last fifty years straight but began to see local industries demand business-orientated students. As a result, the university started directing its supply chain department to create well-rounded students who excel in analytics and personal skills.

Foresights

Companies such as Gartner and US News began ranking college programs across the United States and the world. People began to take an interest immediately. Each Supply Chain ranking company, Gartner and US News, critiques colleges on different criteria, specifically suited to make them unique from the other. The research performed below has the purpose of diving deeper into the colleges that have had previous success. Investigating the basic positioning tactics some of these schools have taken on a bi-yearly basis to achieve the status of being a "top twenty-five program." These so-called rankings have begun to mean more to colleges because they can "provide tons of data and statistics that can help students select a university" (Explorer, C. 2021). This research was performed to provide universities with the adequate tools to achieve national recognition success through a unique personal interview process. A look into these schools found fascinating variables that, when presented properly, could lead an upcoming university to land a spot in one of Gartner's or US News's famed top twenty-five spots.

Gartner Ratings

Gartner Ratings release a comprehensive ranking of undergraduate and graduate programs every two years, eagerly awaited by universities across the nation (Bokhari, 2020). The ranking system encompasses three main categories: program size, industry scope, and programming scope (Bokhari, 2020). Data is collected from questionnaires that universities complete, including fifty-nine undergraduate and sixty-seven graduate programs (Baker, L., & Twitter, F. 2020). A dive deeper into the categories that compromise the rating system shows the three subjects laid out. The program scope comprises the availability of coursework that may not be available at another institution, making it inherently unique. This method includes various attributing roles, including the ability for a student to use technology, manage people, and interweave these skills into a core curriculum that produces top-notch students (Rob O'Byrne, 2020). Gartner also evaluates the starting salary of the college's graduates and the student's chances of being successful after graduation regarding industry value (Rob O'Byrne, 2020). Finally, the rating system includes a scoring section for the opportunity of an undergrad to secure an internship. New exciting additions added to the Gartner rankings recently were industry leaders' ability to name the programs they believed had the most significant impact or potential for producing high-quality students. This year, a new addition to the Gartner score system includes a scoring system for diversity and inclusion, consisting of the number of "ethnicity breakouts of students" and

teachers across the program (Baker, L., & Twitter, F. 2020). Gartner's last aspect of evaluating and ranking its universities is how many undergraduates the program produces. Gartner has been producing Supply Chain rankings since 2008 (Bokhari, 2020), making this the thirteenth year that the results have been available.

US News Today

US News today focuses on a different set of criteria, making them a unique contrast to compare some of the rankings with Gartner. US News produces its rankings "solely on the judgments of deans and senior faculty members at peer institutions" (Moorse, R. 2020). They began surveying each year five hundred and eleven business programs across the United States. The survey included a scale where universities ranked all familiar colleges from one to five on their perceived quality. They then dive deeper into individual programs that a college may offer, such as Supply Chain Management. The unique programs within the college are ranked on a "peer assessment" survey and had to be nominated by at least seven other programs to be eligible for ranking. Supply Chain Management has been on the program ranking system for many years now, but one of the newcomers to the scene includes business analytics. The top twenty-five schools get announced around July or August each year (Moorse, R. 2020).

Research Methodology

The research method used to gather information from the top twenty-five supply chain programs was solely documented using Qualitative Data methods where primary elements were identified. For foresight, qualitative data aims to answer a specific question and explore phenomena (USAID 2005). Multiple qualitative data sources were used, including structured interviews, content analysis from articles, and podcasts. Throughout the interview, the recording of information begins followed by using frequent questions asked to participants. The qualitative data used to collect information included an "Open-ended" method where interviewees could respond with their opinions, news, and examples (USAID 2005). The data was recorded using screen recording software, handwritten notes, and audio recording software. The qualitative method was the method of choice over Quantitative (Gathering information using a structured set of questions.) because of the advantage of describing personal experiences or any trends they may have been experienced. The value of a questionnaire would have given us reliable information. However, it would fall short of the goal of gathering information that universities currently do not have access to, specific advice that may apply to that particular institution. Throughout the process, all of the top twenty-five university department chairs or similar authorities were contacted within one month. Each chair of the top twenty-five supply chain programs was asked to participate in the interview process. Interviews lasted for fifteen minutes; ten overall responses were recorded, ranging from large public universities to smaller private institutions. Each provided valuable insight and information that specifically affected their local radius of students. After multiple interviews, the research was concluded after no new information began to come forth, formally known as saturation. Five primary elements emerged from the data, including centers of influence, experiential learning opportunity, continuous development of the Supply Chain degree, mindfulness of rankings, and availability of the Supply Chain Major to other students within the university.

We compiled the information into five fundamental building blocks from the data collected across three months ranging from February to April. Specific building blocks were selected due to their potential of monumental impact in transforming universities into high-performing organizations. The overall intention of these five points is to develop aspiring programs to reevaluate their institutions and begin growing their program with lessons from other leading

institutions—the more comprehensive, educated, and driven students in the Supply Chain industry, the better.

Building Block #1: Centers of Influence

One of the first reoccurring themes reviewed throughout the interview process was building block #1: centers of influence. This term is a concept coined by supply chain and business professionals often these days. A center of influence is a college institutional agreement with local corporations to be involved with the progress of their business program, with mutual benefits for both organizations.

Universities will recruit multiple companies, organizations, and corporations to be members of an elite group for their business college. These could be reasonably local to regional in scope. – Professor A.

Our Supply Chain Center of Influence is essential for the successful longevity of our program; it has truly made our students become one step closer to being professionals.- Professor B.

I sent out ten handwritten requests for companies to join a successful business owner team; to start a center of influence. It only took three days to fill the entire program. – Professor C.

The corporations invited to the centers of influence sometimes pay a small fee to be members of this influential group. An organization's entrance to the group enhances overall growth in corporate interest from companies outside of the original area for local students. For example, if it becomes somewhat trendy to recruit candidates from this specific school, it could drive more competition. According to Professor A, the opportunities for post-grad job offers also increase in correlation with schools that have a center of influence at the heart of their Supply Chain campus; This phenomenon occurs due to the teacher referral system, campus interview abilities, and the students' overall natural development.

Some universities have companies pay between \$13,000-45,000 to participate in this strategic group. -Professor C.

This entry fee is a marketing opportunity and a long-term employee inflow investment, where many see success overall tied to their center of influence involvement. This concept can also be a disadvantage for some schools because they may not have the proximity to corporate headquarters. This concept can be called "enhanced corporate communication," where the students benefit from the school's relationships with local employers. According to BizEd, these centers of influence bring along some other nontraditional benefits such as professional development opportunities and insights; some examples of this includes teaching students how to under-promise - over-deliver, foster long-term relationships, and discover the art of negotiation. When they allow a company to join their team, some universities will negotiate how many times they can visit, market, or be present on campus (Weber, B. 2012). Centers of influence on college campuses also seem to drive university's reputation and student involvement on campus. If more corporate activity occurs on their campus, they are more likely to be more involved in extracurricular activities (Weber, B. 2012). Some schools also utilize their professors'

relationships that are already pre-established within some past companies. Diving deeper, this means that several schools have teachers from the workforce and have multiple connections in the industries they teach. Therefore, they can reach back out and see if there are any opportunities for their current students or business college to interact. As mentioned before, this does give some of the larger schools an advantage due to their proximity to big cities or nearby metropolitan areas.

Another way a center of influence increases a university's national presence is through its public relations marketing abilities offered with corporate agreements (Felix, E. 2020). Schools will publish on social media the number of guest companies that they have arriving on campus that specific day portrays an active engagement with the local community. This marketing method is also used vice versa with the companies because they can advertise to their clients how they are developing a talent pipeline through leading universities.

Another reason center of influence is essential to supply chain programs is that it leads to more research donations to the school, increasing the quality of education offered at that specific college (Well. 2019). The ability for schools to have state-of-the-art facilities for students to perform substantial research is significant. When businesses take an interest in a college, this will allow students to branch out globally more than the region where their school is currently located, proving valuable for students to expand their learning experience. An example of this could be a company showing interest in Cheerios university. They have offices in Moon County, TX, but also in Oxford, England. This global opportunity now unlocks a brand new potential international experience for students from this university (Well. 2019).

One of the last benefits of centers of influence is the concept of iron sharpens iron in the education industry. Many students and colleges do better when there is competition around them. With websites currently available such as LinkedIn, it is easier to advertise effectively (Well. 2019). So, having these companies in the college could lead to a more significant psychological push for success. Every student is trying to be the best possible version of themselves. It was also mentioned how these companies do not get approached as often as some may believe, and a simple invitation can go a long way. This intimate act of sincerity tends to be a growing concept across the nation, and many top-ranking supply chain programs had systems in place similar to this. The goal is to recruit more students, jobs, salaries, influence, and work habits throughout the school.

Building Block #2: Experiential Learning Opportunities

The #2 essential building block for a top-tier supply chain program is the school's ability to promote experiential learning opportunities, including internships, study abroad opportunities, and Co-Ops for its students.

The number of internships a student secures before they graduate directly correlates to the level of job they will be offered once they finish their undergraduate (Saltikoff, N. 2017). While interviewing and observing the top-ranking supply chain schools, one reoccurring tendency stuck out sharply. If a university had many students landing summer internships, study abroad opportunities, and Co-Ops, they performed very successfully as an overall program. When more students get offered, more students are deemed qualified in the corporation's eyes.

We began making internships a mandatory part of their graduation requirement, and the results have been fantastic. Each student had to secure and get training during their Summer between Sophomore and Junior year or between their Junior and Senior year. – Professor D.

This has proven to be a needed addition because many say: "the numbers don't lie, students are unprepared for the workplace" (Tipograph, J. 2019). Many students find internships helpful because they can see if they enjoy or dislike a company early in their career outlook, therefore, avoiding a situation where unhappiness would've been the outcome. This system aims to get the students high paying long-term careers with the proper resumes suited to match up against other schools. Some colleges that mandate internships tend to offer a short course that students can take instead of an internship if they have a significant conflict.

Diving deeper, some universities mandate a mandatory study abroad experience, occurring less often than the internship opportunity but still very interesting to observe.

We mandate a study abroad experience to ensure all students gather real-world exposure before graduation. It's something not many other colleges promote, but we see a real benefit after the students return. -Professor C.

They saw the benefit of cultural conditioning and worldly exposure to making their students stand out in the job field, making them more recruitable. This university also mentioned how since they began enforcing a mandatory study abroad, they have developed financial resources for students who need help paying. Colleges need to make students aware from day one that they should expect to pay for a trip at some point during their duration of college. The students who studied abroad usually studied abroad on a trip focused on their specific subject. For example, if there were an Accounting study abroad trip available, the students would explore the country of India's top accounting company in Delhi. There is research showing study abroad trips create better teachers and the universities that have implemented this system. Teachers become more engaged and interested in the subject and create a more holistic approach to the traditional methods of teaching a class (DiBacco, 2018).

Another deviation that students can pursue in schools that mandate an internship could be a Co-Op (An internship held simultaneously with their schooling education) that has grown increasingly popular with Senior level students. This dual credit system gives students more free time to get corporate knowledge while also completing their undergraduate program. In addition, students who receive a Co-Op opportunity have a 50% chance of being offered a job which could allow more students to rest assured of their job opportunities (Fry, J. 2018).

If a school currently does not have these Co-Op opportunities available, a conversation with the current dean of business should be the first work at hand. Acknowledging that students want this and other school credit opportunities leads to a ripple effect across the campus. – Dean A.

Building Block #3: Continuous Development of the Supply Chain Degree

Another key objective for a school to become a top-tier supply chain program is building block #3: continuous development of the supply chain degree. This is shown through the first supply

chain programs, various undergraduate degree paths, the background of professors, number of students-graduates, and guest speakers.

Let us begin by delving into the history of several of these university supply chain programs. Many of these programs arose from already existing marketing and logistics schools. The commissioning of some of these Supply Chain programs schools came from the Department of Transportation (DOT) to help the United States fix some of the logistical issues it was facing, such as automobile transportation and groceries. Many schools created their supply chain program in the early 2000s due to the rising overall demand for a global economy.

When these programs all began, they gained popularity quickly but sometimes had an issue with deciding what kind of students they wanted within the program. Some had more of an engineering-centered background, while others were more business and analytics-focused. - Dean A.

The schools interviewed began to show a common theme: "benefits of a holistic approach" within the supply chain department. This approach entails that when students arrive on campus, they begin their introductory undergraduate pre-business courses—exposing students to all aspects of the business school, such as accounting, marketing, economics, data analytics, entrepreneurship, and mixed-in electives. This enables undergraduates to see different majors they may want to pursue. Then, when students enter their sophomore year, they begin to dive deeper into their specific major. For example, if they start committing towards the supply chain, they will create a two-year track containing their supply chain focus. This track gives students the ability to weigh the benefits and not get too centered on one subject.

Another concept a few high-ranking universities took was making students choose a major from the day they step on campus as a freshman. They will be a supply chain major for four years with some other business classes tied in, but the ultimate goal is to grow their knowledge within that subject. When they reach graduation, students are masters of that subject while connected with mandatory internship experience in some cases.

We've seen successful results in this structure, such as long-term commitment to the industry and an overall more in-depth learning experience that spans four years. – Professor F.

The development and career path of university professors also tie into the overall continuing development of a Supply Chain degree. Many high-ranking professors are tenured professionals who have corporate work experience before entering the college-educated landscape (L, S. 2021). Some benefits of the work experience career path are the experience and portrayal of reality some students can give. Students sometimes developed a higher level of trust with a teacher in the industry they are teaching (L, S. 2021). According to Stephanie L, these teachers are more organized, practical, and have an overall enhanced education layout than professors with less corporate work experience.

Another aspect of a continuously developing supply chain program emphasizes class size and the results that stem from various student-teacher ratios. While interviewing universities, many had

multiple ratios ranging from lecture halls with two hundred plus students to some who had a max of thirty students per classroom.

More one-on-one student-teacher experiences correlate to a higher overall educational environment being presented to the students. -Professor E.

If a teacher isn't engaging the student during those times, they lose valuable exposure, and students are spending money with no psychological benefit. As a result, some universities began with small student-teacher ratios and increased the number due to the overall popularity of the supply chain major at their school.

A vital program centerpiece that enables continuous development is bringing in guest speakers that give students' knowledge of the courses or career paths currently popular or in demand. Guest speakers provide an alternative perspective on topics; students benefit from their independent thinking and immersive discussions (Staff, S. 2019).

I believe guest speakers provide essential learning opportunities for students interested in a specific career path. There is clear value in hearing someone's personal story of why they pursued that profession and the value it brought into their life. – Professor D.

Building Block #4: Mindfulness of Rankings

A look back on the overall rating systems shows that some universities spend various resources assessing their overall rank. Many schools are trying to achieve a higher rank. This statement leads to building block #4: mindfulness of rankings. After all, this ranking system is only available for the colleges that take the time to fill out an application. Some schools who were recently ranked said:

We previously did not have the proper staff available to produce the amount of data needed to turn in an application. So, an excellent initial step for an unranked university would be developing a team of teachers, graduate assistants and solely focused on making this process more streamlined and available to achieve success. – Professor B

From another perspective, these rankings are also valuable marketing tactics for some universities. This helps justify the time and attention needed to complete the large packet. Many universities will post a LinkedIn article or send out a piece of media to their students through campus publishing practices.

We were ecstatic to be ranked this high. I was ecstatic. Our faculty and staff were ecstatic. Our administrators were ecstatic. Our students were ecstatic. Our alumni were ecstatic. Our industry partners were ecstatic. – Professor S.

A few interviewers were complaining throughout the interview process, stemming from the Gartner rating company changing their grading criteria. However, in 2020 they added a diversity and inclusion piece to the application process that surprised some universities. One professor stated:

These new criteria moved the goal post, favoring a few universities that would not otherwise be in the top twenty-five. – Professor Q.

The same professor mentioned that US News today is more streamlined and unbiased due to the ranking system coming ultimately from peer reviews rather than a submission. A few universities said that "deans live and die by the ranking system." This high faculty motivation could encourage some of the unranked colleges to push their faculty to achieve higher goals because of the numerous benefits available.

I invite the top twenty-five ranked supply chain schools to our prestigious case competition each year because these schools are simply the best. -Professor H.

This opportunity shows that schools that break this threshold may have more overall networking advantages, regional competitions, and faculty relations. Case competitions are just one example. A few employers mentioned that these rankings directly determine which applicant pool they may focus on or recruit throughout the year to utilize time and money (Writers, S. 2020). A quote from a highly ranked university seems to sum up the program perfectly:

We take pride in this news, and being recognized as a leader in supply chain education is a testament to the dedicated and tireless efforts of our faculty and staff, students, alumni, and recruiters. – University Z.

Building Block #5: Availability of Supply Chain to Other Majors

The last and final building block for Supply Chain success is #5: availability of the Supply Chain major to other students within the university. Some universities and corporations recommend other department students to take on a supply chain major because it adds such a valuable resource to their education (RIT. 2021). An example of this is business school deans highly encouraging their engineering majors to become supply chain minors because this will result in higher salaries and more potential relocation abilities to their worldwide needs (RIT. 2021). Another aspect of curriculum development that has become increasingly more popular and could be a breakthrough for a smaller university is the push for multiple minors within their degree focus. Studies have shown that students with various undergraduate experiences perform better than those focused on one subject (White, 2015). Many schools are also beginning to look into the services and implementation of Supply Chain into their master's program offering. This higher education option is beneficial because it shows students the longer-term longevity their major may have or advanced course offerings. The documentation of multidisciplinary education is continually growing. Some of the critical benefits within our current global landscape include diverse learning styles and more perspectives on different parts of the education system leading to a more well-rounded student.

Next Steps to Develop A Strong Supply Chain Program

This research began with the question of "what primary elements of a top supply chain program need to be included?". The hope was to provide tangible steps and clues for aspiring supply chain programs to consider as they seek to develop robust supply chain programs that can continue to develop talent for the supply chain industry. The information below encompasses the first five steps a university should take to increase its probability of long-term success.

1. Universities currently not ranked within this top twenty-five category can focus on first developing a supply chain department then beginning to dive deeper into the teacher selection and course load process that precedes this overall goal.
2. Supply Chain Programs can either be directed towards a two- or four-year focus with a mandatory internship, study abroad, or Co-Op addition.
3. Universities can decide whether they want to establish a strategic center of influence with a local corporation.
4. Programs can begin the journey towards completing a Garter application or receiving a US News referral by properly networking with universities across the nation.
5. Develop a team focused on continuous program innovation, striving for any additional educational upgrades the university could holster for success.

Conclusion

The basis of the research has shown many exciting correlations present throughout the interview process. Many top-ranking universities operate at a professional pace and have similar structures that make their schools the best in the nation. Some of these objectives are solely recommendations, nothing that is guaranteeing success. One of the exciting parts of this research was to observe many professors cross-referencing other deans from other schools on what they were doing well. They had a community of communication where everyone knew each other on a first-name basis. The founding of these relationships come from various case competitions, regional faculty meetups, or solely through publications from multiple news outlets describing interviews of how their specific university is now some of the tops in the nation. Throughout the interview process, some schools were willing to conversate with more details than others but overall talked to many large and small universities, ranging from public to private schools. This showed an overall nationwide drive for mutual success in the business industry. This research portrayed the need for continual growth within all universities, focusing on creating a better tomorrow.

References

- Baker, L., & Twitter, F. (2020, June 24). Gartner releases supply CHAIN University top 25 for 2020. Retrieved April 28, 2021, from <https://www.freightwaves.com/news/gartner-releases-supply-chain-university-top-25-for-2020>
- Briggs, S. (2020, December 16). The science of attention: How to capture and hold the attention of easily Distracted students. Retrieved April 28, 2021, from <https://www.opencolleges.edu.au/informed/features/30-tricks-for-capturing-students-attention/>
- Damast, A. (2015, June 06). Why supply chain management has become a hot major at business schools. Retrieved April 28, 2021, from <https://poetsandquantsforundergrads.com/2015/06/06/why-supply-chain-management-has-become-a-hot-major-at-business-schools/>
- DiBacco, |. (2018, October 12). 5 reasons why business students should study abroad. Retrieved April 28, 2021, from <https://www.4point0tours.com/blog/5-reasons-why-business-students-should-study-abroad/>
- Explorer, C. (2021, April 28). The pros and cons of using college rankings. Retrieved April 28, 2021, from <https://www.campusexplorer.com/college-advice-tips/24CA24E9/The-Pros-and-Cons-of-Using-College-Rankings/#:~:text=Pros%20of%20College%20Ranking%20Systems&text=In%20the%20broade%20sense%2C%20rankings,available%2C%20career%20opportunities%20and%20more.>
- Felix, E. (2020, April 06). Best practices for university partnerships. Retrieved April 28, 2021, from <https://www.brightspotstrategy.com/industry-university-partnerships/>
- Flaherty, C. (2020). Study: Some things matter more than class size when it comes to student success. Retrieved April 28, 2021, from <https://www.insidehighered.com/news/2020/06/18/study-some-things-matter-more-class-size-when-it-comes-student-success>
- Fry, J. (2018, June 08). Co-ops offer work experience students need. Retrieved April 28, 2021, from <https://insidesources.com/co-ops-offer-work-experience-students-need/#:~:text=In%20fact%2C%20nearly%2050%20percent,job%20offers%20also%20pay%20better.>
- L, S. (2021, April 13). 4 reasons why you should care if your professor is an industry professional. Retrieved April 28, 2021, from <https://www.topuniversities.com/student-info/careers-advice/4-reasons-why-you-should-care-if-your-professor-industry-professional>

- Moorse, R. (2020, September 13). Best undergraduate business programs methodology. Retrieved April 28, 2021, from <https://www.usnews.com/education/best-colleges/articles/undergraduate-business-programs-methodology>
- RIT. (2021, April). What can you do with a supply chain management degree? Retrieved April 28, 2021, from <https://www.rit.edu/articles/what-can-you-do-supply-chain-management-degree>
- Rob O'Byrne on June 23, Rob O'Byrne on May 9, Rob O'Byrne on December 23, Rob O'Byrne on June 4, Rob O'Byrne on March 5, Rob O'Byrne on September 14, . . . *, N. (n.d.). 7 essential supply CHAIN Leader's skills and why you need them. Retrieved April 28, 2021, from <https://www.logisticsbureau.com/6-key-supply-chain-leaders-skills-and-why-you-need-them/>
- Saltikoff, N. (2017, May 01). The positive implications of internships on early career outcomes. Retrieved April 28, 2021, from <https://www.naceweb.org/job-market/internships/the-positive-implications-of-internships-on-early-career-outcomes/>
- Staff, S. (2019, October 09). The benefits of guest speakers on your university campus. Retrieved April 28, 2021, from <https://www.studyinternational.com/news/real-world-value-university-guest-speakers/>
- Syed M. Zubair Bokhari - XDIMENSION SOLUTIONS. (n.d.). Category: Transportation and logistics. Retrieved April 28, 2021, from http://www.scdigest.com/ontarget/20-07-06_gartner_top_supply_chain_universities_2020.php?cid=16960
- Tipograph, J. (2019, April 18). The numbers don't lie: Students are unprepared for the workplace. Retrieved April 28, 2021, from <https://www.earlystagecareers.com/esc-articles/2018/2/28/the-numbers-dont-lie-students-are-unprepared-for-the-workplace>
- USAID. (2005). *Qualitative Research Methods: A Data Collector's Field Guide*. Research Triangle Park, NC: Family Health International.
doi:<https://www.fhi360.org/sites/default/files/media/documents/Qualitative%20Research%20Methods%20-%20A%20Data%20Collector's%20Field%20Guide.pdf>
- Weber, B. (2012, July 01). Corporations on campus. Retrieved April 28, 2021, from <https://bized.aacsb.edu/articles/2012/07/corporations-on-campus>
- Well. (2019, September 24). Industry and university collaboration: How partnership drives innovation. Retrieved April 28, 2021, from <https://venturewell.org/industry-and-university-collaboration/>
- White, |. (2015, April 02). 5 benefits of taking a minor while in college. Retrieved April 28, 2021, from <https://www.worldwidelearn.com/education-articles/5-benefits-of-taking-a-minor-while-in-college.html>

Writers, S. (2020, December 17). These are the 30 colleges most likely to land you an enjoyable career. Retrieved April 28, 2021, from <https://www.bestvalueschools.com/rankings/colleges-enjoyable-career/>