

University of Nebraska - Lincoln  
**DigitalCommons@University of Nebraska - Lincoln**

---

Educational Administration: Theses, Dissertations,  
and Student Research

Educational Administration, Department of

---

8-2019

# Employer Reports of Skills Gaps in the Workforce

Samantha K. Mosier

*University of Nebraska-Lincoln*, [sammimosier@gmail.com](mailto:sammimosier@gmail.com)

Samantha Kristine Kaiser

*University of Nebraska-Lincoln*, [sammikkaiser@gmail.com](mailto:sammikkaiser@gmail.com)

Follow this and additional works at: <https://digitalcommons.unl.edu/cehsedaddiss>



Part of the [Higher Education Administration Commons](#)

---

Mosier, Samantha K. and Kaiser, Samantha Kristine, "Employer Reports of Skills Gaps in the Workforce" (2019). *Educational Administration: Theses, Dissertations, and Student Research*. 306.

<https://digitalcommons.unl.edu/cehsedaddiss/306>

This Article is brought to you for free and open access by the Educational Administration, Department of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Educational Administration: Theses, Dissertations, and Student Research by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

EMPLOYER REPORTS OF SKILLS GAPS IN THE WORKFORCE

by

Samantha K. Kaiser

A DISSERTATION

Presented to the Faculty of

The Graduate College at the University of Nebraska

In Partial Fulfillment of Requirements

For the Degree of Doctor of Philosophy

Major: Educational Studies

(Educational Leadership and Higher Education)

Under the Supervision of Professor Marilyn L. Grady

Lincoln, Nebraska

August 2019

# EMPLOYER REPORTS OF SKILLS GAPS IN THE WORKFORCE

Samantha K. Kaiser, Ph.D.

University of Nebraska, 2019

Advisor: Marilyn Grady

Skills gaps in the workforce are a common conversation in the current value proposition of higher education. Colleges are expected to help students prepare for a world-class workforce while maintaining the integrity of the academic mission. Employers have similar but different opinions on the preparation of college graduates. This exploratory study took an in-depth look at the perceptions of sixteen employers in a region of the Midwest on questions about the perception of hiring managers about the skills gap in the workforce. Questions focused on work readiness, common challenges, and opportunities that exist to combat these hiring challenges. The themes that emerged from the study provide a foundation for future research with employers and conversations on skills gap in addition to providing guidance to colleges.

Five themes emerged from the study: corporate strategy, role of the university, experience, applicant skills, and career management. Recommendations include developing formal relationships between the employer and the university, supporting lifelong learning for new hires, hiring based on the potential for learning and offering more internships. The participants presented ideas and suggestions for best practices and noted how to best connect students to opportunities.

## Acknowledgements

A doctorate degree has been a distant dream for so long and now that I stand by the finish line, I am quick to recognize those that gave me their endless support for this pursuit. To my husband, Steve, who has not only been an incredible spouse but also a dedicated father. His dedication to this process and belief in me is truly what made this dream a reality. I can't wait to celebrate this accomplishment together and to spend more time together now that it is completed. To Will and Whitney, you are my world and know that your dad and I are here to help you chase your dreams wherever they lead you. I hope this accomplishment is a testament to you in knowing that with dedication and hard work, anything is possible.

To my mom and dad, Mitch and Karen Mosier, who never once doubted my dream of earning a Ph.D., thank you for your never-ending support and unending love. We did it! To my sister and her husband, Katy and Kyle Deterding, thank you both for your love and understanding. Katy, you have always been such an amazing supporter and cheerleader for me and for that I will forever be grateful.

A special recognition for those who helped me stay focused and on track, especially those at the University of Nebraska at Omaha in the Academic & Career Development Center and my good friend, Jordan Black. My ACDC co-workers and the leadership at UNO, especially Cathy Pettid, all ensured that it would be possible to complete this degree and continue working full-time. Their support for the day-to-day and also their many conversations on tips and tricks to keep progressing were critical in my success. And to Jordan Black, thank you for being such a great friend and fellow

scholar. Your supportive texts and willingness to help watch Will and Whitney were immensely helpful through this process and I will forever be grateful for your support.

Finally thank you Dr. Grady for walking me through this process and pushing me forward. You never doubted me and continue to believe in me as I prepare for next steps beyond this degree. I am also thankful to my committee members, Drs. Barbara LaCost, Kent Mann, and Dixie Sanger for all their feedback during this process.

## Table of Contents

List of Tables and Figures.....	vi
List of Appendices.....	vii
Chapter 1 – Introduction.....	1
Purpose Statement.....	1
Research Questions.....	1
Rationale of the Study.....	2
Delimitations and Limitations.....	3
Significance of the Study.....	3
Summary.....	4
Chapter 2- Literature Review.....	5
Skills Gap Overview.....	5
College Student Skills.....	12
Perceptions of Employers.....	17
Summary.....	22
Chapter 3- Methodology.....	24
Research Design.....	24
Research Questions.....	25
Data Collection Methods.....	26
Data Analysis.....	27
Procedures.....	27
Validity.....	27
Role of the Researcher.....	28

Personal Biography.....	28
Ethical and Political Considerations.....	28
Summary.....	29
Chapter 4 – Research Findings.....	30
Participants.....	30
Data Analysis.....	34
Themes.....	34
Corporate Strategy.....	34
Role of a University.....	39
Experience.....	42
Applicant Skills.....	44
Career Management.....	48
Summary.....	52
Chapter 5 – Summary.....	53
Chapter 6 – Recommendations for Future Research.....	59
Prior Research.....	59
Implications for Practice.....	60
Future Research.....	62
References.....	64
Appendices.....	71

## List of Tables and Figures

### Tables:

Table 1	Participant Demographics and Experience.....	32
Table 2	Company Participant List.....	33
Table 3	Who Should Take Responsibility for the Skills Gap.....	57

### Figures:

Figure 1	Model without a Pathway Intermediary.....	8
Figure 2	Model of a Pathway Intermediary.....	8



## List of Appendices

Appendix A: Interview Protocol.....	71
Appendix B: Participant Consent Form.....	72
Appendix C: Recruitment Email.....	73

## **Chapter 1**

### **Introduction**

Institutions of higher education are responsible for their role in preparing the next generation of the workforce. Higher education is not the only stakeholders in this conversation, especially when discussions of the skills gap and the best ways to address the skills gaps emerge. Employers, administrators, and the government also play active roles in the conversation. However, higher education is often cited for these gaps (NACE, 2017). With the different philosophies, ideals, and views on the skills gap creating barriers between the stakeholders, this study was designed to explore the employers' perceptions of the issue, focused on a Midwestern region of the United States.

#### **Purpose Statement**

The purpose of the study was to explore employer perceptions of the skills gap in a Midwestern, metropolitan area. I sought to understand the qualities employers seek in new college graduates, along with the challenges and opportunities that exist in hiring this population. Another goal of the study was to understand the role of a manager in hiring college students. Understanding more about the expectations hiring managers face when hiring college students can inform practice and expectations for institutions of higher education.

#### **Research Questions**

The research questions guiding the study were intended to elicit a holistic perspective of the perceptions of hiring managers in hiring college graduates and the skills gaps that may exist. Three research questions guided the study.

1. What qualities are prioritized when hiring a new college graduate?

2. How do hiring managers perceive the challenges associated with hiring college students in their area?
3. How do hiring managers perceive the opportunities associated with hiring college students in the area?

As the workforce demands continue to evolve, the field of career advising and preparation on college campuses needs to be proactive in how college students are prepared for the workforce. As with other offices on college campuses in the area of student affairs, assumptions exist about the roles that a career center should play in the relation to preparation for the workforce. Preparation of college students to be career ready is not always seen holistically; but, it is seen as the responsibility of one office.

### **Rationale of the Study**

Much of the research related to the skills gap comes from the assessment of students and employers through quantitative measures. The skills gap is referred to in the literature; but, it lacks qualitative perceptions from employers from different geographic regions in the United States. Additionally, blame continues to go back-and-forth between employers and academic institutions as it relates to who should be addressing the skills gap issue. Cappelli's (2015) study concluded that a serious skills gap did not exist in the U.S. labor market; but, the sole issue that needed to be discussed is who has the responsibility to train students entering the workforce.

In order to understand the skills gap from the perceptions of Midwestern employers, this study focused on the challenges and includes discussions of possible solutions that apply in career center settings on college campuses.

### **Delimitations and Limitations**

Several limitations existed in this study; however, steps were taken to overcome the potential barriers. Interviewing hiring managers at various companies runs the risk of only getting one person's opinion from each company. This study included fifteen companies that hire in a Midwest, metropolitan region and have been reported to hire 4-year college graduates from local institutions in the area. Hiring managers interviewed may struggle delineating the differences between the degree attainment of the graduates. Additionally, opinions may exist about different programs and degrees. Strategies I used to overcome these limitations included reminding the interview subjects of the purpose of the study at the beginning of the interview and keeping the interview focused on the purpose of the study. The hiring managers were interviewed at their place of work in a private space to make them comfortable in answering the questions from their personal point of view.

### **Significance of the Study**

Although literature exists on the skills gap related to career readiness, employers and students, I had not found studies that provided opportunities for hiring managers to talk freely about their perspectives on the topic based on interviews as the primary form of data collection. Earlier reports were based on quantitative or mixed-methods studies. This study was based on open-ended questions. The hiring managers provided their own hiring perspectives based on their personal experiences during interviews.

Career services professionals, employers hiring new college graduates and institutions of higher education will benefit from the findings of this study. The findings can assist career services professionals in decoding perspectives of hiring managers. Other college campus

offices could also benefit from the findings, especially those who seek outside funding and relationships with local employers.

### **Summary**

The workforce is constantly changing and the services required to prepare students may not be available to meet the challenges. Career services offices and professionals are often referred to as an office that gets graduates' jobs. In order to meet both the internal and external expectations of career services, a better understanding is needed in order to be aware of the perspectives of hiring managers and the companies that hire college students. This research provides suggestions based on data obtained from hiring managers.

## Chapter 2

### Review of Related Literature

#### Overview

The literature review provides information about employers' perceptions of the skills gap in college graduates. The perceptions of students' skill needs and research in higher education about the perception of the skills gap are presented. The review includes literature from the past ten years and that addresses the skills gaps of college students.

#### Skills Gap Overview

Trade publications and news articles discuss how institutions of higher education in the United States do not adequately preparing students for the world of work. In a report by the National Association of Colleges and Employers (2017), the author defined the failings of higher education as having too many four-year degrees in majors with no clear links to the labor market. In addition, the trend of sending more students to four-year colleges rather than to the trade schools where middle-skill job needs are addressed in their preparation programs.

However, the responsibility does not rest solely on the shoulders of institutions. Hora (2017) discussed the need for everyone to invest in the issue in order to allow a skills infrastructure to be created, rather than just stand-alone programs within universities. Other issues discussed stem from the concern about finding employment for the growing United States population in addition to those individuals who were affected in the 2008-2009 recession. The McKinsey Global Institute (2011) published a report which discussed the need for businesses, government leaders, educational institutions, and the workforce to come together and put together a robust economic recovery plan.

Cappelli (2015) discussed the reports from employers and government sources on complaints about the lack of skills in college graduates. The report found little substantiation and evidence for these complaints but assessed the range of charges and provided three possible explanations for the complaints from employers. Cappelli (2015) defined the *skills gap* as a widespread shortfall found in the basic skills of future employees, usually attributed to the failure of the educational system (p. 252). A *skills shortage* was referred to as a low supply of individuals possessing the skills for particular occupations, like engineers or information technology. Finally, the term *skills mismatch* was defined as the idea that, at any given time, the supply of skills and the demand for skills could be out of synch in either direction in the form of oversupply or undersupply. Through the review of evidence and complaints, Cappelli (2015) concluded that the evidence does not support the idea that serious skill gaps or skill shortages exist in the U.S. labor force. The debate rests between whose responsibility it is to train the students or workforce; academic institutions or employers. The lack of academic research on the topic has been a guiding factor in some of these misunderstandings.

Internationally, the skills gap is worse according to Singh & Sharma (2014). Recent studies conducted by the Society for Human Resource Management (SHRM) predict that skills gaps in technical and functional roles will continue to pose hiring challenges, especially in Brazil, Russia, India, and China. Jobs are changing rapidly; and, educational attainment is lagging behind the need for skills in these countries. Based on the information, Singh & Sharma (2014) suggested the following as strategies to bridge the skills gap: “Improving the governance of academic institutions and industry linkages, building Centers of Excellence, effective industry involvement, and attracting top talents to the faculty pool” (p. 32).

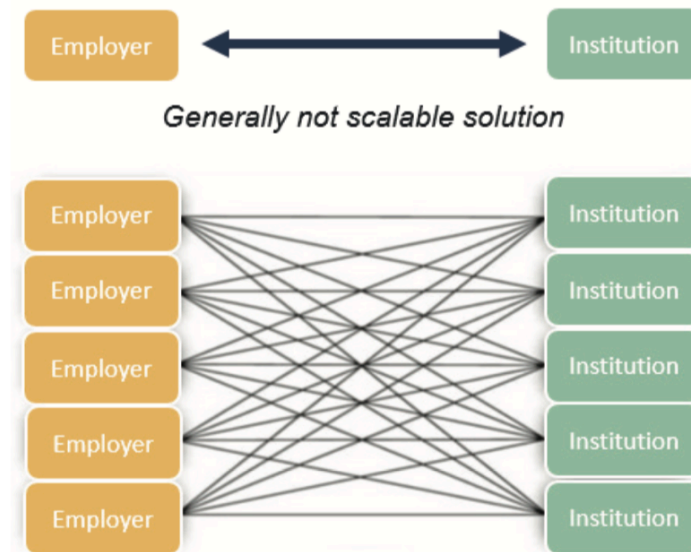
Along with these suggestions, the authors proposed that companies need to take a more active interest in the issues to stay competitive in the world economy by ensuring that the talent pool from the academic institutions are in alignment with work requirements.

Kochan et. al (2012) focused on the discussion of who could fix the “middle-skills” gap, which is defined as occupations that require postsecondary technical education and training and, in some cases, some college math courses or degrees (p. 3). Examples of these types of jobs include nursing, computer technology, and high-skilled manufacturing. The authors argued that through most of the 20<sup>th</sup> century, workers were trained either by going to college or on the job. With the decline in union-employer training programs, the skills training does not support the needs in the 21<sup>st</sup> century. The suggested solution was to create collaborative programs between employers in a region or industry, educational institutions, unions, and governments. Another solution was to create “one-stop career centers,” in particular for industries where individuals receive the training they need to apply and succeed in particular jobs.

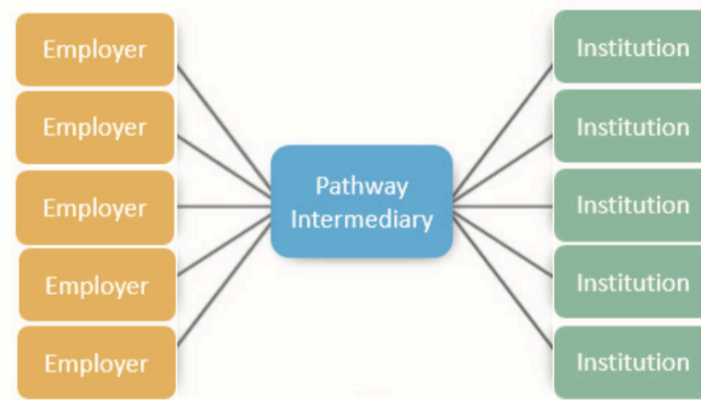
Craig (2016) argued that the skills gap is a top economic priority and that evidence exists that both students and employers were unhappy. Students were unhappy that only 20% have jobs upon graduation; and, employers were unhappy, stating through survey data that only 11% of employers think students graduate with the necessary workforce skills. The solution proposed by the author is the intentional creation of pathways from college to employment, perhaps even in the form of a pathway intermediary like a boot camp. The article provides two models. Figure 1 is an example of what it generally looks like at institutions without a formal intermediary. On the other hand, Figure 2 illustrates what a clear pathway can look like for both an institution and employers. Programs exist for students to enter if there are feelings of inadequacy, especially for technology. This article recommends some companies that are



working to hire students who graduate without the technical capability but with the potential for learning.



*Figure 1:* Model without a Pathway Intermediary. Adapted from ‘Providing students with pathways to high-value careers,’ by R. Craig, 2016, p. 60.



*Figure 2:* Model of a Pathway Intermediary. Adapted from ‘Providing students with pathways to high-value careers,’ by R. Craig, 2016, p. 60.

Schirf & Serapiglia (2017) focused on the information technology (IT) industry specifically, as a result of annual survey inventories that are conducted by trade magazines and

research groups attempting to gauge the current state of the industry. The surveys do not take into account the large spectrum of industries that employ technology workers. The researchers interviewed four “C” level executives from four different industries to discover which skills they have identified as being the most valuable for potential employees. Overall, the results show that the “skills” gap is not just technical but also includes an absence of soft skills including communication, problem solving, and interpersonal skills. “The soft skills surrounding the technical skills may become the deciding factors in employment decisions (p. 78).” The authors argue that re-training a specific language or software package can be done rather quickly compared to the ability to think and act systematically.

**Skills gap blame.** The larger skills gap discussion is leading to deeper conversations on the value of higher education and the need for more connection between academia and the workforce. Wolff & Booth (2017) discussed a solution through creating a depository of information for students, families, and employers to refer to in order to get meaningful information on employability in specific academic programs and at particular institutions. Institutions in this depository will have the opportunity to be awarded an Essential Employability Qualities (EEQ) certification, which will be based on evidence that is primarily outcomes-based. This solution comes directly from the increase in students desiring to be employable after college. Employability was defined as “the ability to find, create and sustain work and learning across lengthening working lives and multiple work settings” (p. 51).

Jackson (2010) presented an international profile of industry-relevant competencies that should be kept in mind for institutions of higher education in order to combat the perpetual blame for the skills gap in college graduates. The profile is based on employer opinions and sources from the last ten years, taken from studies done primarily at the undergraduate level.

The competencies, covering 20 pages with thorough definitions, are offered through an international perspective. The conclusion challenges both employers and graduates to close the gap. Employers must do a better job of articulating what they want from graduates while students must be better aware of what they are learning and the application those topics have in the workplace.

Skills gaps are discussed beyond college graduates. Hurrell (2016) explored three case studies to better identify who could be to blame for the soft-skills gap issue in organizations. Through three specific cases, the topic of *skills withdrawal* emerged, which could be a result of an employee's dissatisfaction within the establishment. A proposed solution from the article was that companies should more intentionally integrate selection, induction, and training practices with the identified skills needs. Another idea explored was the idea of an *expectation gap*, defined as mismatched expectations between institutions of higher education and organizations hiring college graduates. Howcroft (2017) explored the vocational skills required for graduates of management accountancy, by focusing on the possible expectation differences that existed between the organizations and the universities. The study interviewed stakeholders and accounting faculty in the UK and Ireland Business schools. The result was a discovery of conflicting views about the general role higher education plays in supplying accounting training.

McDonough (2017) proposed that employers take more active initiative in closing the skills gap. Data was collected through the Strayer@Work Skills Index, which is an online tool that uses LinkedIn data to provide a view of the skills that industries are looking for, while also looking at the prevalence of those skills among job candidates. The author argued that the skills gap is framed too broadly, noting that the deficiencies need to be assessed at the industry, organization and individual level. A finding was the discrepancies in the job descriptions and

employers failing to articulate the skills necessary for specific jobs. In addition to this finding, the author suggested that companies use the Strayer@Work Skills Index and consider other initiatives to bridge the gap like management training programs and job placement based on candidates' skill levels. Examples were provided in the article.

Other training programs, like Finishing School programs, have emerged to help aid the perceived skills gap between college graduates and employers. Ali et. al (2014) examined the effectiveness of Finishing School programs from the student and employer perspectives. The perceptions of 1092 students and 31 employers were gathered through a survey questionnaire, using a convenient sampling design. Focus groups were conducted with smaller numbers from both groups. The data was analyzed using descriptive statistics, Chi-square tests, and a multinomial logit model. Students were positive about the outcomes of participating in Finishing School; but, employers found gaps in what the graduates had, specifically problem-solving skills, information management, and English communication. Finishing School programs may not be meeting the requisite needs and will need to be examined in order to be more effective.

The government takes a position on the subject. Shipps & Howard (2013) evaluated the government response to the skills gap between job seekers and available jobs through the lens of unemployment and the development of job creation programs. An emphasis is placed on the training programs that exist in both high schools and colleges with an emphasis on the reduction of the skills deficit. The authors concluded that more research is needed on programs that seek to close the skills gap, evaluation of effectiveness, and generation of increased resources.

In summary, the skills gap is well defined. All constituents, higher education institutions, employers, and students, have a stake in reducing the skills gap. Limited research has examined

the perceptions and attitudes of the skills gap. Limited research exists on how the skills gap can be closed.

### **College Student Skills**

The skills of college students are mentioned throughout the literature. Studies of student and university employee perceptions of these skills are reported as student aptitudes. In this section, perceptions and performance of students and their skills are identified. Research based on students interests or involvement in particular industries is presented.

#### *Students, Career Counselor, Faculty Perceptions of Skills*

Jones et. al (1995) conducted a study commissioned by the National Center for Educational Statistics (NCES) based on the appropriate order and identification of skills college graduates need to achieve to become effective employees in the workplace. The study focused on communication and thinking skills. The authors worked with university faculty, employers, and policy makers to develop the order of communication skills for new college graduates. The communication skill categories were writing abilities, speech communication, and critical thinking. Disagreements existed between faculty, employers, and policymakers on the hierarchy of skills; but, there were areas of agreement. The highest consensus was on being able to assess the credibility of communication and to be able to evaluate the strengths of claims and arguments. The study concluded with implications for practice and included ideas on the application of these skills to teaching practices.

Jackson & Wilton (2016) studied the capabilities of undergraduate students in career self-management and the influence of work-integrated learning (WIL). The study focused on business students in the UK and Australia. The findings supported the need for more work-integrated learning programs on college campuses across multiple disciplines. WIL is defined as

the representation of the intersection between theoretical and practice learning. The concept is referred to in higher education as experiential learning, cooperative education, and work-based learning. It exists in many forms, including practicas, fieldwork, placements, internships, and client-based projects (p. 267). The study included 480 student participants who completed a self-assessment in an online survey format. The conceptual framework used to examine the importance of self-managing one's career included four dimensions: self-awareness, opportunity awareness, decision-making learning, and transition learning. Students answered 21 questions within these dimensions on a five-point scale ranging from very poor to very good. The assessment ended with two open-ended response options about a) their personal development through the work placement in career competencies and b) their description of the aspects of the work placement helped them the most. Self-awareness was consistently high among students although opportunity awareness was lower. Implications suggested were that the expansion of WIL programs across disciplines and the intentional creation of these experiences with layers of support were essential since the data did not indicate uniform growth across varying experiences.

Rao (2015) concentrated on the perceptions of students and career counselors concerning job skill requirements. The study included students and career counselors from a large, public institution. The study emphasis was on the enhancement of the marketability of students through an intervention strategy, specifically using de Bono's Six Thinking Skills and Covey's 7 Habits. Students were unaware of these models and found the intervention to be extremely helpful in bridging the understanding of the skills gap for undergraduate students.

Lopez-Moreno (2017) focused on a discussion of students in the UK and how those students perceive their skills on a global scale. Many employers value global skills more and students are not able to recognize or articulate those accumulated global skills. For example,

many UK students study abroad at a higher rate than students within the United States.

Understanding and articulating the value of the skills earned through that experience is a gap for these students. The paper also notes the high demand for global skills in the UK.

Hodge & Lear (2011) compared perceptions of students and faculty on workplace employment skills. Two-hundred and fifty-four upper-level students and 37 faculty members, within the college of business, responded to a quantitative survey based on what students and faculty perceived to be the most important employment skills. Students from the United States had significantly different responses to leadership, creativity, and the value of a second language compared to the international students surveyed. Between students and faculty, the biggest differences were in the areas of personal management, critical thinking, problem-solving, writing, speaking and leadership. These differences create opportunities for faculty to look closer at curriculum and the content of classes, making alignments between the skills employers value, and ensuring that the needs of the academic program are met.

Landrum et. al (2010) worked specifically on the perceptions of workforce readiness with recent alumni of a Psychology program. Seventy-eight alumni were surveyed on their preparedness and competency in 54 areas of workforce readiness, changes since graduation, and suggestions for universities on how to provide more opportunities for workforce success. Alumni rated self-discipline as the highest quality. The greatest changes since graduation were confidence, independence, and maturity. More behavioral-based learning and the ability to apply ones' learning was suggested in the improvements section. Although this study did not focus specifically on recent college graduates, it sheds light on an important perception to include in the discussion of the skills gap with recent college graduates. The alumni studied include recent college graduates.

**Students and the skills gap in particular industries.** Patacsil & Tablatin (2017)

explored the skills gap based on responses from students and employers who participated in an IT internship program. The data was collected through a survey. Employers and students agreed on the importance of soft skills and the continual development of those skills as an IT professional. Perspectives differed on the hard skills. Students rated hard skills as very important. The employers in the IT industry rated hard skills as somewhat important. The recommendation that emerged for university settings to enrich the soft skills and entry-level hard skills component of the IT curriculum.

**Student performance.** Mohammah Akhriza et. al (2017) assessed skills of students in the Information and Communication Technology sector, specifically in Indonesia. Data mining was used to identify skillsets that students within the major had mastered and compared to data mined from the industry side on skillsets required by the job. Through this process, the researchers were able to propose solutions to the university systems. Plans exist to make sure the process continues in order to keep the curriculum up to industry standards in the university setting.

Bharathi (2016) conducted a similar study in India related to communication skills, specifically looking at the relevance of the syllabus, the opinions of student performance, and actual student performance. Data was collected through a questionnaire. Results suggested that students working to garner communication skills in the educational setting may be being failed by academic communication standards and expectations, thus depriving the students of a core employability skill. In other words, the communication skills received in a traditional academic setting don't mirror the communication skill needs in the workforce.



Michalak et. al (2017) studied international business graduate students concerning their information literacy aptitude and perceived confidence. The Information Literacy Assessment (ILA) and the Students' Perceptions of Their Information Literacy Skills Questionnaire (SPIL-Q) were combined into one survey and distributed to 932 students. 172 students responded and revealed a small confidence gap between men and women, women responding as being slightly more confident with these skills than men.

Examples of faculty testing various models of learning in the classroom appear in the literature. Martz et. al (2017) discussed a problem-based learning (PBL) modeled class in a first- and second-year business curriculum. The model was attempted in response to employers in the area identifying innovation and creativity as key areas of focus for a 21<sup>st</sup> century employee. The instructors throughout the research set specific course goals to track learning through the PBL model, one being that students should be able to describe at least five problem-solving methods or activities. Eighty-eight percent of the students satisfied this learning outcome. Long-term learning through the PBL method is continually being evaluated.

Lim (2015) also tested learning in the classroom as it relates to employer demands. The study included a cohort of students that completed an integrated academic assessment in a capstone course. The assessment was a rubric students used to assess each others' work at the end of the term. Grades achieved through the assessment were then analyzed. It was determined what level of transferable skills the student had. This was completed on a voluntary basis for the students; and it did yield positive results in students being able to better the skills learned in their academic program.

In this section, I discuss the skills of college students through perception and performance, as demonstrated in the literature. Questions are asked of many constituent groups,

including students, faculty, career counselors and alumni about graduates' skills. A key group of university professionals not included in the literature is university administration. The literature focuses on academic programs and industries and does not appear to address academic programs and majors.

### **Perceptions of Employers**

This section includes employers' perceptions on the skills that college graduates do not possess. The following sections include skills frameworks, technology, gaps identified by specific industries, and proposed solutions by employers.

**Skills gap frameworks.** The following are examples of the skills gaps referred to in the literature. According to the *Bridging the Gap* (2017) NACE report, up-to-date technical expertise, strong work ethic/habits, lifelong learning, and problem-solving are the overarching skills referred to under the skills gap umbrella. Other skills frameworks noted by employers have been identified in longitudinal studies including Finegold & Notabartolo (2008) and Binkley et. al (2010). The categories of skills included analytical, interpersonal, ability to execute, information processing, capacity for change, and living in the world. Payscale's 2016 Workforce-Skills Preparedness Report discussed skills; but the skills were linked to major job groups, indicating the potential for a pay boost depending on the major job group.

The Association of American Colleges & Universities (AAC&U) sponsored survey work to be done on the topic with employers and college students titled, "Falling Short? College Learning and Career Success" (2015). More than 400 employers were surveyed. Approximately 90% of the respondents placed heavy emphasis on the need for students to complete an applied learning project, referred to as applying learning to real-world settings. A surprising finding was that students who were surveyed through this process closely aligned with these thoughts on an

active learning project but differed greatly with employers on their perception of their preparedness. Students expressed higher levels of confidence in the level of preparedness for the workforce in all areas compared to what the employers expressed.

Other scales and frameworks exist to better evaluate specific skills of graduates or students in particular academic programs. Wielkiewicz & Meuwissen (2014) tested a 16-item lifelong learning scale (WielkLLS) with 575 college students enrolled in two private, Catholic, single-sex, liberal arts campuses with joint curriculum. Results illustrated that reading is the primary way for individuals to acquire new knowledge and is an indicator of a lifelong learner. Students who identified as readers and who had studied abroad had higher lifelong learning skills. The researchers argued that the scale and the topic of lifelong learning may need to be a focus in curricula, specifically with Psychology, because it is a skill desired by the industry.

**Technology.** Technological skills are a popular topic of conversation in relation to the skills gap, especially related to employers. Miller (2014) discussed a need for, not just some students, but all students to become more adept in the skills of big data and analytics. The argument stated that every professional occupation must adapt to this mindset; and, all university curricula should be reviewed to infuse these important skills, all based on data collected from Job Trends and other jobsites that identify the fastest growing jobs.

One study focused on a possible training program that could bridge the perceived business and technological skills for information technology (IT) graduates. Gorman (2011) conducted a quantitative needs assessment with IT managers at Fortune 200 companies to develop a 4-module training program. The program was not only evaluated by the IT managers but also by the students completing the modules. Ultimately, the researchers proposed a training

of some kind for IT graduates and professionals to better bridge the gap between technical training and leadership/business training.

**Skills gaps in specific industries.** Researchers examined specific industries in relation to the skills gap and college students. Trajanoska & Kostovski (2016) studied the tourism and hospitality industry from the employers perspective in Macedonia and concluded that competencies in this industry need to be continually evaluated at the university-level. A noteworthy finding was a gap in creative thinking which the employers valued; but the newly hired students did not exercise. D'Eloia & Fulthorp (2016) studied employers needs within municipal recreation agencies. In order to determine if graduates were meeting the needs of these agencies, 206 California Parks and Recreation Society members were asked how recent college graduates could be better prepared for entry-level, full-time employment. The data was collected electronically and was analyzed using thematic reduction. The three main themes in the data included experience, interview skills, and job awareness. The results were presented to university programs within the state to enhance academic preparation of the students.

Business was discussed, especially when it came to the needs of employers who hire business students. Kleckner & Marshall (2014) looked regionally to assess the employer perceptions of communication skill deficits among new employees and compare those perceptions with those of business students and faculty. Surveys were distributed electronically to three different populations: 292 undergraduate students, 29 faculty members, and five business associations. Regional employers reported that oral and written communication skills are most valued; and also, those skills had not been met in recently hired graduates. No statistical difference was found between the perceptions of undergraduate business students, faculty, and employers regarding what communication skills matter most.

The accounting industry is a popular focus throughout the skills gap literature, with numerous studies and articles discussing the level of commitment the accounting profession has to closing the skills gap with new graduates. Thomson (2017) examined the pervasive issue of the accounting curriculum not keeping pace with industry standards. As a result, the article concluded that companies and universities need to be equal partners in developing the talent needs. Sarea & Fatema (2014) addressed similar issues in accounting specific to the Ahilia University of Bahrain. Martin & Alleyne (2017) provided a checklist to employers on eight steps to take in hiring entry-level accountants and overcoming the skills gap. The study used to design the checklist is from the Institute of Management Accountants. Low et. al (2018) examined the importance of non-technical skills in accounting education and recommended incorporating practical case study problems into accounting curricula. Lightweis (2014) addressed the accounting skills gap with a focus on the perceptions of the skills missing based on what the faculty and the accounting professional associations said.

Agribusiness was another area of emphasis throughout the literature. Gunderson et. al (2011) quantitatively explored skills gaps between what is needed for agricultural positions and what skills the graduate possess upon graduation. Survey respondents, employers within the agricultural sector, were asked to rank the importance of competencies within recent graduates. Some of the skills gaps discovered were technical in nature, specifically referring to a greater understanding of business and financial risk. Problem-solving skills were endorsed.

Starkweather (2012) reviewed ways human resource professionals can be better developed and concluded that behaviors modeled from doctor and patient interactions can be used as a step in the right direction for talent development.

*International skills gaps.* Studies exist that note the differences and similarities in skills gaps between countries. Schwalje (2011) looked at Latin American and Caribbean countries and provided anecdotal evidence produced by business leaders and government entities that revealed a serious skills gap. Through the World Bank Enterprise Survey dataset, a survey was administered in 125 countries to more than 100,000 private companies that had more than five employees. This produced a wide view of the global skills gap; but, the author presented the findings through the lens of Latin America and the Caribbean. The overarching findings illustrated how countries are tethered to the level of education when it relates to the skills gap and that industries may need to go elsewhere to recruit top talent.

Malik & Venkatraman (2017) studied the skills gap of college graduates and industries in India. The study was based on a literature review to understand the skills gap, despite a large, young population. Jackson & Chapman (2012) looked at the skills gap in Australia, based on ratings provided by both managers of recent business graduates and business faculty. The framework for the ratings included assessment of 20 skills and 45 associated workplace behaviors. The results of the ratings were analyzed by work area, business activity and discipline. Overall, the managers and faculty agreed on the different skills and behaviors that required more refinement within business graduates, especially the non-technical skills. The study concluded that there is an opportunity to continually re-evaluate with a special emphasis being placed on the non-technical skills and work readiness.

Employers were also an area of concentration in a study conducted by Ho (2015) to determine what employers want in graduates; and, what students are looking for in a job. Conducted in Taiwan, a questionnaire was given to 250 students and employers. The results indicated a mismatch in what students expected in jobs, especially related to pay, benefits, and

job prestige. Employers, on the other hand, weighted job security, interesting work content, opportunity for promotion, and comfortable work environments higher. With a growth in the unemployment rate in Taiwan, and with more institutions of higher education opening, the author suggested that this perception gap needs to be addressed, and perhaps qualitatively, to better examine why these gaps of expectations have formed between students and employers. Chan & Lin (2016) researched the skills gap in Taiwan, focusing more on a holistic approach for preparing students for the labor market. The study was conducted as a multi-faceted case study, analyzing student learning, teaching, curriculum, and structural and enterprise demands to estimate the extent to which these graduates fit the needs of employers.

Alshare & Sewailem (2018) investigated skill perceptions of both employers and business educators in Qatar. The participants completed a survey that dealt with 20 skills needed for the 21<sup>st</sup> century workforce specific to business students. The results differed between the two parties, with employers rating the need for soft skills higher and the business educators rating the need for hard skills higher. The results suggest the importance of employers and faculty engaging frequently in order to address the skills gap and ensure priorities are aligned.

In this section, the perception of the skills gap was explored through the lens of the employer. Lack of connections between employers and higher education institutions is a common theme throughout the literature, although many solutions are provided to empower employers and industries to take a more active role in closing the skills gap.

## **Summary**

The review of literature provided the context for this qualitative study designed to explore employer perceptions of the skills gap in a Midwestern, metropolitan area. The skills gap is a major topic in news about economics, policy, and higher education. The missing

research in the literature is with employer and the examination of the perspectives of employers in a specific geographic region in the Midwest that have clear ties to a Midwestern University.

This study will examine the perspectives of employers in a Midwestern, metropolitan area.

Exploring this topic qualitatively will investigate this topic in a new way.



## **Chapter 3**

### **Methodology**

This chapter is focused on the data collection and analysis methods used for the study. The purpose of the study was to explore the employer perceptions of the skills gap by asking hiring managers and recruiters to share their experiences hiring recent college graduates. This was accomplished through in-person, face-to-face interviews with hiring managers who recruit at local universities in a Midwestern, metropolitan area. Implications of the findings can be used to help inform career services professionals and employers understand the perceptions of the skills gap in relation to recent college graduates.

#### **Overview**

The purpose of the study was to explore employer perceptions of the skills gap in a Midwestern, metropolitan area. In this chapter, the research design and procedures, research questions that guided the study, population and sample details, data collections process, and an explanation of the data analysis are presented.

#### **Research Design**

Every employers' approach to hiring is unique. Each employer's perception of the skills gap is different. In order to capture the perspective of both the hiring experience and the skills gap, an exploratory-qualitative approach was used for the study.

To address the research questions, I used an exploratory-qualitative research approach. I was interested in "how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences" (Merriam, 2009, p. 5). Based on the gaps in the literature, I explored the holistic nature of hiring college students from the perspective of local and regional employers. The qualitative design of the study aligns with Creswell's (2013)

definition of qualitative research by “inquiring into the meaning individuals or groups ascribe to a social or human problem” (p. 37). The design was chosen to embrace the ideas of the hiring managers concerning the skills gap.

### **Research Questions**

The research questions were designed to elicit the perspectives and experiences of the interview subjects. Three research questions guided the study.

#### **Research Question 1**

- 1. What qualities are prioritized when hiring a new college graduate?*

The goal was to understand the qualities hiring managers look for in new college graduates. The questions were open-ended.

#### **Research Question 2**

- 2. How do hiring managers perceive the challenges associated with hiring college students in the area?*

Learning more about the hiring challenges in a particular region was helpful in the identification of barriers to making “good hires.” This included the skills and program specific hires that companies sought where shortages may exist due to the of the lack of graduates in a particular area.

#### **Research Question 3**

- 3. How do hiring managers perceive the opportunities associated with hiring college students?*

This question focused on reasons companies and hiring managers want to hire new college graduates. Some companies have specific goals in hiring new college graduates, others may not

have these goals. This question also led to conversation about how to capitalize on hiring new college graduates for employers and institutions.

### **Data Collection Methods**

Data collection was completed through interviews with hiring managers and recruiters at their offices. The data collection was through in-person interviews. Creswell (2013) stated that the primary challenge in interviewing are the mechanics of the interview itself. Consistency with the process, clear instructions, and a solid transcription process are all mechanics of the interview that we must attend to and be attentive to throughout the process. I approached the study with these challenges in mind. I worked to ensure the consistency of the process. All participants read the same instructions before the interview began.

The interviews conducted for the study were held at the company where the hiring manager worked. This was convenient for the hiring manager and provided a familiar atmosphere for the interview. The interviews were all of different lengths. The shortest interview lasted 22 minutes and the longest interview lasted 52 minutes.

### **Sample Selection**

A goal of the study was to obtain a diverse sample of hiring managers from different companies who had different levels of experience hiring recent college graduates. Graduation data from a Metropolitan university in the region was used to select hiring managers for the sample. Hiring managers who had hired at least 3-5 recent college graduate students in the previous year were included in the study. Preference was given to hiring managers who had been recruiting new college students for the company for at least two years. This distinction was made in order to elicit informed answers through the interview process. I traveled to 15 companies in a Midwestern, metropolitan area and interviewed 16 hiring managers.

## **Data Analysis**

One interview was conducted with each manager. The interviews were audio-recorded. Interviews were transcribed by a professional transcriptionist. An open-coding process was used to analyze the responses, defined by Creswell (2013) as using “exact words of the interviewee to form the names for these codes or categories” (p. 239). The coding process led to the five themes that emerged through the study.

## **Procedures**

All interviews were audio-recorded and transcribed by a professional transcriptionist. I read each transcription twice. The initial round of coding consisted of identifying common themes or observations. Codes were then created by categorization in the margins on the transcription. In the second round of coding, In Vivo coding was used to extrapolate direct quotes from the participants.

Once the two rounds of coding were completed, I organized each of the codes into separate word documents for each participant. New documents were created for each participant with listed codes and emerging themes. The codes were then combined. A final round of coding occurred to see which codes were similar; and, how many quotes aligned with the various codes.

## **Validity**

“Ensuring validity and reliability in qualitative research involves conducting the investigation in an ethical manner” (Merriam, 2009, p. 209). The researcher worked to control the possibility of inherent biases. I discussed in detail my current role in higher education and experiences in career services. The background plays a critical role in establishing trust and confidence in the participants. I made was available after the formal interview process to discuss the topic further and to make sure the participant felt heard.

The need for validation in qualitative research is essential in order to “assess the ‘accuracy’ of the findings, as best described by the researcher and the participants” (Creswell, 2013, pp. 206-207). The researcher made the interview experience comfortable and convenient for the hiring manager. Coming to their space helps build trust in the process. Additionally, the topic of the research was central to the work of the hiring managers. The interview process created an opportunity to discuss the questions. An opportunity to discuss these research questions may have not existed previously.

### **Role of the Researcher**

#### **The Researcher**

I have worked in higher education, at three different institutions with different classifications for the past eleven years. Those institution types include a community college, a land grant institution, and a metropolitan university. I have spent the last five years at a metropolitan university directing academic and career services. The position is split with responsibilities in academic and career advising; but also, facilitating the first-year experience course. These experiences position me to engage with employers and connect students with opportunities.

#### **Ethical and Political Considerations**

There are several ethical and political considerations that I considered, including my current role in higher education. Sensitive data may have emerged through the interview with the individuals involved in recruiting in the region. This type of data did not emerge from this study. Pseudonyms were used to mask the identities of the participants. Information about the study was kept on a secure, university protected Box account. The researcher was the only person who knows the password. Hard copies of the interview transcripts, codes, and notes were

kept in a desk at my personal residence. Hard copies of any materials will be destroyed after the dissertation is approved.

Interview participants were read a consent form (Appendix A) before the beginning of the interview. Before proceeding with the interview, participants were required to sign the consent form. Any information given by participants through the interview process that could reveal their identity or the identity of the company where the participant worked was removed. An interview protocol was created for the study (Appendix B). No benefits were provided to participants participated in the study.

All of the interviews were recorded using an application on a personal iPhone. The iPhone is password protected and files were deleted immediately after the recordings were uploaded to a Box account. A digital recorder was used as a back-up through the process and these files were also deleted after the recordings were uploaded to Box.

### **Summary**

This chapter included the outline of the methodology for the exploratory-qualitative study. The findings of the study have the potential to inform employers, colleges, students, and administrators about the skills gap and perceptions that may exist. In this chapter, the research design, the purpose of the study, the data analysis strategy, and the role of the researcher were discussed.

## Chapter 4

### Research Findings

The research focused on interviews with recruiters and managers from companies in a Midwestern, metropolitan area and their perceptions on the existence of a skills gap in recent college graduates. Sixteen hiring managers and recruiters were interviewed from a metropolitan area. The sample included two males and 14 females. The three research questions focused on the qualities prioritized in hiring, and opportunities in hiring, and the challenges in hiring. All questions were specific to recent college graduates. During the interviews, participants described their experiences and thoughts related to the skills gaps they had identified through their professional work in their company.

At the beginning of the interviews, participants were asked to describe their roles at their companies; and, how long they had been working in human resources. Another question was concerned with the number of years of experience each of the participants had in university recruiting. In the following section, brief descriptions and employment backgrounds are presented. Pseudonyms are used for all participants to assure their confidentiality. There were a total of 16 participants', 14 white females and two white males who participated in the study.

#### Participants

Allie is a female hiring manager who has been recruiting for 14 years, with 12 years in university recruiting. Ruby is a female recruiter who has been recruiting for 4 years, with 1 and ½ years in university recruiting. Michelle is a female recruiter that has been recruiting for 2 years, with 9 months in university recruiting. Lucy is a female recruiter who has been recruiting for 3 years, with 3 years in university recruiting. Jan is a female hiring manager that has been recruiting for 9 years, with 9 years in university recruiting. Samantha is a talent acquisition

consultant that has been recruiting for 4 and a ½ years, with 4 and ½ years in university recruiting. Tammy is a human resources generalist that has been recruiting for 7 years, with 7 years in university recruiting. Larry had the most experience of the participant pool, having worked as a recruiter for 30 years with 6 and ½ of those years focused on university recruiting. Kim is a human resources specialist that has been recruiting for 7 years, with one year focused on university recruiting. Steve is a hiring manager that has been recruiting for 15 years, with 6 months in university recruiting. Amy has been a recruiter for 8 years, with 4 years in university recruiting. Molly is a human resources generalist that has been a recruiter for 5 years, with 5 years in university recruitment. Roxanne is a female manager and is the participant with the least amount of experience recruiting. She has been at her respective company for 20 years and has spent the last 9 months involved in university recruiting. Laura is a talent acquisition specialist that has been recruiting for 6 years, with 2 years in university recruiting. Finally, Ann is a female recruiter that has been recruiting for 6 years, with 3 years in university recruiting.



Table 1

*Participant Demographics and Experience*

Name	Sex	Role	Years Experience	University Experience
Allie	F	Manager	14 years	12 years
Ruby	F	Recruiter	4 years	1.5 years
Michelle	F	Recruiter	2 years	9 months
Lucy	F	Recruiter	3 years	3 years
Jan	F	Manager	9 years	9 years
Samantha	F	HR Consultant	4.5 year	4.5 years
Tammy	F	HR Generalist	7 years	7 years
Larry	M	Recruiter	30 years	6.5 years
Kim	F	HR Specialist	7 years	1 year
Steve	M	Manager	15 years	6 months
Amy	F	Manager	8 years	4 years
Molly	F	HR Generalist	5 years	5 years
Roxanne	F	Manager	20 years	9 months
Laura	F	HR Specialist	6 years	2 years
Ann	F	HR Generalist	6 years	3 years

The companies represented in the sample are from a Midwestern, metropolitan area. The companies were targeted based on their involvement in hiring recent college graduates at local colleges and universities. The participants in the study have been recruiting specifically at universities for a combined total of 60 years. Table 2 presents the companies that the

participants in this study represent with the estimated number of how many recent college graduates were hired in the past year.

Table 2

*Company Participant List*

Company Name	Estimated Number of Recent College Grad Hires in 18-19
Lincoln Financial Group	70
Valmont Industries	45
First Data	120
First National Bank	50
Interpublic Group (IPG)	16
Union Pacific Railroad	125
Cobalt Credit Union	70
Berkshire Hathaway Homestate Companies	100
Mutual of Omaha	30
Green Plains	Not disclosed
University of Nebraska at Omaha	30
ConAgra Brands	25
University of Nebraska Medical Center	Not disclosed
NEI Global Relocation	6

## **Data Analysis**

Interviews were transcribed by a professional transcriptionist within a week of the completion of the interview. After the transcriptions were completed, I followed an In Vivo coding process to build themes from the data. This process involved reading through the data, dividing the text into segments, labeling the segments with codes, removing repeated or redundant codes, and moving codes into themes. Creswell (2016) provided guidance for building the themes, recommending a 5-7 theme range (p. 156). This study yielded five themes which is within that recommended range.

### **Themes**

Five themes in total emerged from the codes and through the data analysis. The five themes identified are corporate strategy, role of a university, experience, applicant skills, and career management.

### **Corporate Strategy**

The third research question was how do hiring managers perceive the opportunities associated with hiring college students in the area? The interviews suggested that all participants work within a larger corporate recruitment strategy at their respective companies, with standardized processes company-wide. Application process and evaluation, hiring techniques, and employee retention were all common threads that emerged from participants.

#### *Application Process and Evaluation*

Most application processes were similar across participants, usually including the mention of a career fair. Tammy, Samantha, Michelle, Jan and Larry specifically mention career fairs as a part of the strategy. Michelle said:

...if I meet 'em at a career fair, you know they're not really required to apply right off the bat. You know if I have a great conversation with them, then I'm gonna take the initiative and reach out to them. Otherwise they may take initiative and reach out to me. So, once that first step's, lookin' at whether I meet them in person or through an application, I reach out to the candidate, I set up a phone interview with them. The phone interview's usually about 20 to 30 minutes max.

Phone interviews or a pre-screen interview was mentioned by all participants. In addition to the phone interview, many of the participants discussed being involved in the paperwork process for all of the candidates. Tammy described the paperwork process most thoroughly:

...we will send them pre-employment electronic paperwork to fill out beforehand. So like the I-9, your tax forms, emergency contact, direct deposit. And then when they start on day one, we'll collect the I-9 documents, bank info, those types a things. But aside from that, we... the HR team probably only spends... 30 to 60 minutes with the new hire, which can be good and bad. But once we're done spending time with them, we hand them off to their manager, and kinda let them dive in.

In addition to the paperwork, some participants discussed required hiring assessments that needed to be completed by candidates. Amy's company uses two pre-employment assessments to help get to know the candidates better through the hiring process.

Strategies for hiring and recruiting using technology were discussed in all of the interviews. Kim said she is "constantly looking at where to post jobs, how much it costs to post jobs, and evaluating the return on investment." Steve mentioned the use of Handshake and Yello, and how his company uses those technologies to "stay in contact with our candidates and making sure they are aware we are still thinking of them."

In evaluation, consistency was discussed as a key idea. Michelle said that her company is “rolling out interview guides,” describing that consistency is priority. Some companies used consistent evaluation practices in other ways. Steve described an elaborate scorecard system:

So... I'll start with we have a scorecard that we keep with all of our universities... So, at the end of every calendar year, we look at all of our numbers and statistics as far as how many hires did we get, how many full times, how many interns... you know. And so like this last year, we did one for the last 5 years. We took a look at 5 years. (Awesome) And we said okay, how... how effective have we been in say diversity hires, (Mm) in... the hires that we get? Are they considered high performers? Are they still here, right? The retention rate, and whatnot. So we tend to put all those things together, and we rank all of our schools.

This ranking system helps the company better identify return on investment in recruiting efforts and allows for a closer look at where funds should be allocated. Half of the participants mentioned the use of surveys with recent hires to evaluate the hiring process. Lucy described her company's process: “We actually send out surveys to the new hires during orientation, on how was your hiring process, how did you feel about your recruiter, and who was your recruiter.”

### *Hiring Techniques*

A resounding technique from participants was the ability to develop strong brand recognition on college campuses. Allie mentioned that this is pivotal for her because it seems to be “sexy to work at a start-up” to most recent college graduates. Not only is it the brand, but it is also making sure graduates know all of the different opportunities available at the company.

Allie elaborated on this further by saying:

And so I think that we have to better paint the picture of we have marketing, we have HR, we have (Um-hm) you know investments. Basically anything that you go to school for, we have in our organization, (Yeah) especially because we are a large organization. So being able to kind of paint that picture, or educate your students that we have those, I think is probably... the biggest thing, or our biggest challenge.

Steve agreed with the above comments and said that brand recognition is a particular focus they have both inside and outside of the metropolitan area. Steve mentioned challenges with the local news creating a company perception affecting his brand recognition. "One of our biggest challenges is probably with what we are going through right now with our reorganization."

The job market can also have an effect on hiring. The current unemployment rate in the metropolitan area these participants were interviewed in is at a historical low, which made this thread mentioned frequently. Larry said that he envied job seekers in today's market and has seen more recent college graduates that have done "little to no job search activity." "They (college graduates) can be calm and focused and particular about how they approach it and that's great for them." Laura paints a different picture with her response, noting that just 10 years ago, unemployment had been higher and there could be as many as "a hundred people" applying for one job. As a result of the current low unemployment rate, she is working with her company to broaden qualifications to get larger applicant pools. "They have so many choices because unemployment is so low... competition is one of the biggest challenges."

The job market has an effect on job offers and the timing of the hiring process overall. Half of the participants mentioned the favorable job market for job seekers and that as a result, they have expedited their processes in getting offers out to candidates. Ann said, "we haven't compromised our process at all and pride ourselves in being concise in our ability to make hiring

decisions quickly.” Michelle, Allie, and Steve also underscored the importance of getting offers in the hands of candidates quickly, especially recent college graduates. “We know that strong, recent college graduates will more than likely have multiple offers so prioritize being the first in hand if at all possible,” Michelle described.

5 of the 16 participants mentioned the importance of cultural/company fit versus the skillset the new hire possesses. Allie said, “for us, it’s hire character and train the skill.” Jan echoed this sentiment by saying, “we’re more concerned about fit than we are sometimes about the technical ability.” Steve mentioned the following:

Do you have the right experiences; do you have the right attitude? Do I think that you’re fit within our culture at Union Pacific? Do you maybe fill a need that maybe we don’t currently have somewhere else? ... over time though, we’re actually evolving our strategy a little bit more because we wanna actually be a little bit more hands on.

### *Employee Retention*

Mentorship and career ladders were common threads discussed in keeping recent college graduates at companies. Tammy described an idea that is being discussed at her organization:

...to start some sort of like mentorship and when we hire an intern, have someone who’s been there 2 or 3 years, who’s still younger, contact them (the new hire) and just say hey, I know you’re gonna be starting an internship and I’ve been here for 3 years, so I just wanna make sure you have an easy transition.

Half of the participants discussed starting a promotional or career ladder to retain recent college graduates in their positions longer. Molly said, “you know, the millennial generation likes to see those promotions and title changes so they feel like they’re getting somewhere.” As a result of this sentiment, Molly was involved in helping create a company-wide ladder, with the hope that

these new hires won't quickly look to go elsewhere. Ruby said that she believed the student being able to see a succession plan and chart their career at her organization has been successful in retention.

So making sure that there is that trajectory ... I mean any position that you start at X company, there will be a recruiter framework provided. So here's the ladder that you can grow within your department, if you wanna grow in your department.

Retention also was discussed in relation to lifelong learning. Allie discussed LinkedIn Learning as a way her company is "curating specific content to address skills gaps." Others mentioned community partnerships to close skills gaps with recent or soon-to-be hires. Lucy described a partnership with a local community college to offer a 6-week crash course on COBALT, Excel and other technologies. Similarly, Kim mentioned some of her organization having the option to attend a local institution to learn more about computer coding and technological platforms. Overall, the participants that discussed keeping recent college graduates at their respective companies highlighted growth opportunities and large company initiatives to retain talent.

### **Role of a University**

All participants discussed the role a university can play in closing gaps in skills for recent college graduates. Two smaller categories emerged in this theme, the first being faculty and the second being the career services office.

#### *Faculty*

12 out of the 16 participants stated that employers need to be invited into the classroom more. Michelle said, "getting employers in classrooms is always a great idea. Talking about, you know, maybe in the capstone class, coming in and talking about what to expect when you



transfer from classroom setting to the real world.” Responses have been mixed from faculty partners. Lucy described a program they attempted with faculty:

Probably a year and a half ago, we tried to do a lunch with the faculty. And we only got like 3 responses from the faculty, which was really discouraging. But we wanted the faculty to be present so we could present the jobs that we’re hiring and what skills the students needed. So I think that... the faculty needs to be more present in it and recognize that they’re training young adults to go out in the professional world.

Steve saw this faculty and employer collaboration as:

Bringing other organizations to classes, to talk about things, which I think would be good. Maybe again, talk about real world examples, about, you know, hey, here’s something we’ve tackled in, in a, you know, whether it’s case studies, or, or whatnot.. I think the more real world we can make it, then that will help prepare them for leaving college.

All participants mentioned a required course for students throughout the interview process. Many offered different suggestions in how this could look. Michelle suggested 6-week skills courses throughout the school year, focusing on Excel and other work ready topics. Ruby said that universities could do a better job working with start-ups in town and integrating that work into the classroom for real-world experience. Roxanne even mentioned that universities, particularly academic programs, should create more intentional opportunities for students to work outside of the classroom and directly with the community or employers. Laura said:

Again, if there could be a class on... not just... resumes, but. Like what, when you exit the military, you have to take tap, you have to go through all these classes, write a resume, all this crazy stuff, and learn how to transition into the workforce in the civilian

world. If there was... a course like that, where that were required, where again, students would learn just about resumes, about applications, of course the interviewing, and... looking at... their degree and what kind a jobs they can get. I feel like a lot a people get a degree, and they may know one job, or two, or sometimes none.

### *Career Services Office*

Collaboration and the role career services offices play in the collaboration was a discussion for some, specifically for Lucy, Tammy, Michelle and Allie. Michelle said:

I think... employers and career centers should unite and partner together to figure those (gaps) out. And then I think we even, you know, bring in those recent college grads. Talk to them. Now that you've been there (workforce); say they graduate in May, get a job in June; talk to them in December and say 'What could we have done better to prepare you to go into the workforce?' And I think maybe the talking to the actual students, getting their input.

Lucy takes it a step further, stating that "business needs to be clear and concise on what they are looking for and universities need to reciprocate by asking in return 'what are you looking for?'"

Larry discussed a recent example of when a university career services office and academic department came to visit them in their office. He hopes to keep cultivating these types of relationships and he said, "hopefully we have some meaningful relationships with the colleges and universities we are associated with and then there is a mechanism in place to give some feedback." Molly, Allie, Tammy mentioned that the student should take more responsibility in their university experience. Beyond that, there was discussion of this preparation being a whole community effort. Laura said:

I think it's, it's gotta be a, a whole community effort. And part of maybe the educational curriculum for students. Maybe even having a class on, you know, this is what different employers and what you might need and, and things like that, yeah.

Some of the career services discussion landed back on the data and creating opportunities for meaningful experiences. Tammy said, "I think job shadowing's good and tours of facilities." Allie suggested that the university consider distinct career paths for different industries. "For example," she said, "if people know they want to get into data, then they need to know they need these skills." Jan mentioned workshops for systems that can be quickly learned could be offered through an office like Career Services.

### **Experience**

Even though the interview questions did not ask participants about professional experiences, 12 of the 16 participants mentioned the importance of professional experience. Participants mentioned "the lack of real-world experience." Michelle said, "I think that's where internships come into hand. They prepare you for that. They get you ready for that." Lucy, Laura, and Roxanne specifically said there needs to be more internships offered to help students gain these valuable experiences. Lucy described a difference she has seen recruiting elsewhere, "I feel like students at my eastern schools started internships right when they graduated high school." Two participants discussed the competitive landscape for their internship programs, which they assumed was also affecting the recent college graduates. Ann said, "While I value seeing a candidate that has led a project all the way through or completed an internship, I recognize that these experiences are competitive. Companies need to offer more of these experiences to stoke the pipeline."

Experiences need to be differentiated and cannot all be from one company or place.

Michelle mentioned the importance of international experience:

Another thing I would say is, um... we're a global company, so something we look at is, you know, are their international education. We're gonna send somebody from the U.S.

over to India, we need to prepare them for that and they need to be prepared for that.

Like what's their culture like, what are they gonna do over there? You know, how do they greet people?

Roxanne offered the suggestion that students work cross-departmentally for these experiences on college campuses. Molly stated in saying that she sees students in college take initiative in getting experience before applying to be a more marketable applicant. Molly said:

A student that I interviewed last week who was talking about how... he's currently going to school and he's a finance major, but he was applying for a part time teller position, because he knew that he could learn so much in school. Like he really needed that real-life experience and to get into the industry.

The landscape for jobs can be difficult for a recent college graduate as it relates to experience.

Kim mentioned that a lot of her jobs that she recruits for require some experience but it can be hard to get that experience.

Experience aids these students in many ways, in large part as it relates to learning how to work in the real world. Ruby, Jan, Kim, and Michelle discussed the importance of the "grooming affect" that internships can have on a recent college graduate. This also allows students to solve real world problems in the appropriate setting. Lucy, Steve, Larry, and Roxanne all mentioned the help specific case study exercises could bring to recent college graduates. Steve provided the following example:

Let's say you're gonna be renewing a contract for instance, right. How would we go about like figuring out like what, what should our rates be for Route A, Route B, Route C?: Where do we have leverage, where we have weakness, right? You know kinda, like go through those kind a things, and, like I said, it would help them work on their skillsets.

Roxanne also offered a specific example:

A lot of what we do is balancing general ledgers. And it's really easy to say the book says these all have to balance. But to actually get into a real live set of... here's the real numbers, and try to figure out where everything, all the moving pieces, is a little more complex than, maybe you've learned in a classroom situation... And that's something you have to get on the job. I think once you've been on a job you have a little bit better idea for the kinds of flexibilities you have to have between... the book learning and, and the real life situations.

Jan summed up the value of experiences to recent college graduates and the skills gap well in providing the following statement:

Yeah, I mean I think just always a perception I think in my head is that... there is a gap there, right. You realize that. But it's the gap between what's black and white and in books and theory and study, between what's done in the day to day world and doesn't always, I mean it uses some of that theory and stuff that you've learned, ultimately there's the gap between learning and doing.

### **Applicant Skills**

The participants were asked about their organizations' role in preparing recent college graduates for positions at their companies as well as what role the university should take in the process. Skills starting with basic office functions leading to software proficiency were

mentioned in addition to missing communication skills. This theme is grouped into three categories; basic skills, communication skills and professionalism.

### *Basic Skills*

Needing more knowledge in basic skills was referred to by all participants. Each participant seemed to have a different idea of what they meant when mentioning basics. Michelle, Laura and Kim all three mentioned “life skills in general” as a specific need when it comes to hires that are recent college graduates. Steve, Lucy, and Samantha referred to basics skills as the Microsoft Office Suite. Steve said, “especially Excel and PowerPoint... it is either a super hit or miss.” Lucy provided a specific example, “I had a hiring manager call me, out of frustration. How do they not know how to set up a graph on Excel?”

The universities failure to teach these basic skills was discussed. Laura stated:

Because school can teach you a lot of great things, but is it going to teach you a lot of the professional skills of, you know, handling customers, or faxing or copying? College doesn't teach you how to type, use Excel, or, or PowerPoint. You may need it for a class or two here, but it doesn't teach you those basic skills or how to write a proper email and communicate with customers who are frustrated via email. Um... it (college) just doesn't teach you those things.

Samantha said that her company has industry specific deficits with these types of skills, which could be feedback given to specific academic programs. She mentioned Excel is especially behind with the accounting majors they hire in the area.

Specific technology skill gaps were mentioned by Jan, Ruby and Michelle. Lucy said that the term skills gap comes up in her workplace when they are talking about recent college

graduates having COBALT , JAVA and C++ experience. Jan specifically mentioned the lack of application of specific technologies:

They're (universities) touching a few of those nuts and bolts things, right. The servers, and actual setting up and configuring of computers, plug in and playing of that. But actually understanding. I had one student come to me the other day and said, 'you know, I really wanna get in cybersecurity. And I've learned all the theory behind it . . . But I actually have never done an actual penetration test.'

Those technological misses can be a detriment to the success of a newly hired, recent college.

### *Communication Skills*

Both written and verbal skills emerged from participants. Michelle mentioned that her observation was that recent college graduates don't seem to know how to talk to leadership appropriately. "Because a lot of times college students are surrounded with students your age... But, how to talk with managers, how to talk with executive leaders." Michelle continued to say that she feels recent college graduate hires have good email responses 50% of the time. "Their replies are very formal and nice, but sometimes I am like 'that's an interesting way to reply to an email.'" Allie added to that point by saying these new hires need polish and to "better know their audience." Kim alluded to recent college graduates struggling to articulate their transferrable skills. "A lot of students have done the job before, they just don't know how to talk about it on their application or resume." Roxanne described this need as "how to develop some of those (office) communication skills, because they're different than communicating with peers." Steve said:

I would say, and I think this is probably a larger societal issue, but like texting and... the instant kind of SnapChat, kind of communication forums, has maybe reduced our ability

to write good emails, and I know it seems weird, but that's... I, we've seen a lot more, informal communication, tryin' to be passed off as formal communication.

Informal communication leads to recent college graduates expecting immediate feedback.

Tammy referenced recent college graduates and their need for quick, fast, and immediate feedback. She said that she tells them, "you will get an answer and that answer is important but its not we're dropping everything to cater right to you."

On the positive side, Allie, Larry, and Lucy all mentioned examples of recent college graduates being more personable compared to other hires. Larry said, "I think there is something, there's still something to be said for the people in the Midwest that they're generally a bit more polite and more diligent." Lucy discussed how she was flooded with cards and emails from recent college graduates while she was out of the office.

I went on maternity leave last year and sent all my employees that I was in the transition with, and, um, a handful were even like, emailing me while I was on maternity leave. Like congratulations; let me see pictures of the baby. Very personal. And when I came back there were even, thank you cards and... I was just like wow. Like, uh, it was a... uh, a relationship and I don't get that with people who have been in the job force for 5 to 10 years.

### *Professionalism*

This subset of applicant skills landed mostly on recent college graduates missing the mark on accountability and professionalism in the workplace. Lucy, Larry, Jan, and Michelle described scenarios in which recent college graduates acted inappropriately in front of senior leadership, overall labeling the interactions as too casual. Lucy said, "new graduates don't realize the chain of command per say." She elaborated with the following example:



I had somebody I hired, and he was working in out of our New York City office, and didn't think, and just walked in, didn't set a meeting, didn't do anything; knocked on the door and walked right into an EVP's office.

Differences in professionalism surfaced when participants discussed trainability. Kim, Steve, Roxanne, and Lucy all discussed the benefits of hiring a recent college graduate to avoid having to retrain. Lucy said, "it's hard to retrain, reteach, or to view a job in a different way." Kim said that in her time in HR, she has seen a ton of experience also come with a ton of bad habits.

"Companies have to be ready to compromise either way... college grads have the theoretical framework and a base of information, and you can develop that person into the kind of employee you need them to be." Steve said that recent college graduates also may need retrained because, "these students, have, you know been taught basically by others or by their parents for 14 years before you ever get them." Roxanne elaborated on the advantages of the fresh ideas a recent college graduate can bring to the workplace.

### **Career Management**

The second research question related to perceived challenges in hiring recent college graduates. NACE (2019) defined career management as the ability to "identify and articulate one's skills, strengths, knowledge, and experiences relevant to the position desired and career goals, and identify areas necessary for professional growth (1)." 9 of the 16 participants mentioned themes of career management as it relates to the skills gap conversation, related to job search etiquette and career growth.

#### *Job Search Etiquette*

Lucy said that recent college graduates have gotten more informal on their resumes.

The other day, I had one resume where he wrote his phone number and right behind it listed 'text first'. I was blown away. I called him anyways, because I thought, you are applying for a professional role now. Called him first... he didn't answer, so then I sent an email and he responded with a please text me.

Navigating the new, professional world was said by a majority of participants. Larry said that these new hires are treated like adults in his business, especially because of the hands-off management style throughout the corporation. Three participants discussed parental involvement, with Tammy sharing that in her hiring experiences with recent college graduates, she still gets a lot of "I need to check with my parents."

Laura and Kim described many discrepancies in understanding the place for the application and resume with recent college graduates. Kim stated, "I know some people don't even read resumes. They just look at the application and they expect you to fill it out completely." Laura added to this by saying:

Schools concentrate so hard on focusing on resumes, which are important, but what nobody talks about is the application, and how our system works. And it's different company to company. But the two companies that recruited for, both have been the same. The application's the main piece, and your resume's an, an accent piece. Honestly. And if your application is incomplete and you put "see resume" all over the place... they won't even get to your resume.

Many participants offered tips for recent college graduates in the job search process. Tammy said, "don't be afraid to apply for things and don't be afraid to put yourself out there." Ann's company sends the candidate tips on how to prepare for the interview. "Because we use

behavioral-based interviewing, we have decided to send an interview guide to our candidates in advance.”

### *Career Growth*

All participants mentioned the high aspirations that recent college graduates have related to their career growth. “Understanding the adjustment period” was mentioned by Larry, Jan, Roxanne, Lucy, Allie and Tammy. Sometimes those career aspirations are realistic, but other times they are not. Michelle said, “I think a lot you know maybe they’re like okay in 2 years I wanna be a manager,” alluding to the idea that this can take many years in her organization to work towards. Ensuring that the recent college graduate is keeping the adjustment period in mind and maintaining realistic goals is critical. Allie said that “the new generation doesn’t realize that they can be in a role for a longer term, and become like a subject matter expert.”

Larry described the adjustment period below:

So it takes some time. Some people very quickly adapt and go there, but for some it is kind of a... I’ve been used to somebody telling me what to do. And that’s not a bad thing, but there’s an adjustment period in some cases. So you might have, you might have people whose work isn’t as timely, who they may not show up... maybe as, on time. Or they may just not know about communicating, given that there is some flexibility there. Communication about my whereabouts and timing and so on is important. So there’s a little bit a getting that figured out.

Molly added to this idea in saying that salary expectations need to be tempered. Samantha, Amy, and Ann mentioned that the competitive market has led their organization to offering more competitive offers.

Michelle, Steve, Allie, Samantha, and Lucy all mentioned location as a factor in career growth for recent college graduates. Michelle brings it up in relation to the multiple jobs students' work, so location needs to be flexible. "But these students are working like full-time, and part-time, 20, 25 hours. We have an intern right now, she's a University X student. She works 20 hours a week for us and 20 hours a week for another company. 40 hours a week total and is going to school." Others refer to this as a detriment to many recent college graduates who hope to grow. For example, in Steve's company, there are many jobs that require you to move right away. Steve said:

We do have some jobs that require either you to move, right. So we're in 23 states. And especially, let's say we're recruiting for like an operating job, so in the engineering department. We require those people to probably move every... 2, 3 years. That can be kind of a challenge, especially if you're in city X and you're from city X. And again, that's not a skill, that's more of a... so it's easier to get people to come here, but maybe sometimes it's a little... harder to get them to wanna move around a little bit . . .

Through the data, this location detail was unique to this specific metropolitan area. Lucy was quick to mention a similar thing that Steve said:

The biggest... I mean, the biggest problem I have with city X is people wanna stay in city X and not move. But it's not really a gap. When I'm calling candidates in city X, usually you know, and you see where they went to school, or where they live, and you just already know. Like alright, I'm gonna call this person. I'm gonna offer if they wanna go to San Antonio for an example. And I know they're gonna say no, because they wanna stay in city X.

## **Summary**

Findings for the study were discussed in this chapter, including the description of the participants and the analysis of the interviews. Five themes emerged from the findings. The five themes were corporate strategy, role of a university, experience, applicant skills, and career management. The next chapter will discuss the themes in summary and how the themes directly relate to the research questions.

## Chapter 5

### Summary

Analyzing the data through the conceptual framework of skills gaps in recent college graduates unearthed five themes: corporate strategy, role of a university, experience, applicant skills, and career management. Through the analysis, we can recognize how these themes answered the research questions that were the focus of the study.

*RQ1 - What qualities are prioritized when hiring a new college graduate?*

All participants who were interviewed mentioned the importance of professional experience for recent college graduates. These responses varied. “Offer more internships,” “I think as many internships as these kids can get into is probably a great idea,” “I mean definitely volunteering and internships,” and “I think experience is getting more valuable.” Even though internships and experiences were underscored, nearly all participants also alluded to challenges some recent college graduates may face in securing an internship experience in the metropolitan area. Amy said, “in just the last two years, we have seen internship offers, particularly in R&D, get more competitive.” To add to that, some other participants mentioned the culture of the region needs to shift to offer more internships. Michelle said, “I feel like when I am recruiting with my eastern schools, I’m working with juniors and seniors that started internships when they graduated high school...I don’t know if we push that early enough here in the metro.”

Participants discussed basic skills as a priority in the hiring process. 12 of the 6 participants mentioned basic office skills in the interviews, directly referencing Excel, Outlook or PowerPoint. Those responses also varied and included, “Like basic Word stuff,” “just basic things like Outlook, Excel, you know, the really basic core technologies,” and “Excel and PowerPoint are super misses.”

A final quality prioritized that participants discussed related to recent college graduates and their trainability compared to someone who has been in the workforce for a number of years. Lucy said, “the reason why we like to go for the college students for most of our role is because trainability is easier there.” Others agreed and added some of the following responses, “you can develop a new grad into the kind of employee that you need them to be” and “retraining somebody who’s learned one way can be difficult.” Overwhelmingly, trainability emerged as an asset and large reason why these companies use resources to attract and hire recent college graduates.

*RQ2 - How do hiring managers perceive the challenges associated with hiring college students in the area?*

Multiple challenges emerged in the interviews as hiring managers discussed hiring college students, most of which related to the application and interview process. All 16 participants spent time describing their approach in marketing and attracting recent college graduates to apply for the roles at their companies. The job market, brand recognition and creative programs for career management and laddering were all mentioned as areas of focus to combat these challenges.

The job market was mentioned by 8 of the 16 participants, with references made to the low unemployment rate in the region. Responses varied on this topic and included the following, “in many ways, it is much easier for job seekers,” “with unemployment so low, it is hard to find somebody that’s qualified,” and “they have so many choices on where to go and the unemployment rates is so low.” Steve, Allie, Amy, Michelle, and Jan all work to leverage brand recognition in light of the job market. Some of these strategies are prioritizing career fairs and employer partnerships at universities, but most focus on developing brand recognition at local

college campuses. Some of those responses included, “we’re just trying to get out there more and showcase the employment brand” and “developing our brand on campus so that more students know what company X is, rather than coming up to you and asking ‘what is company X?’”

Career management and laddering was mentioned by 10 of the 16 participants. As it relates to career management, many employers were surprised at the lack of communication and professionalism exuded from their recent college graduates throughout the hiring process. Lucy described a particular example, “The other day I had a student on his resume write his phone number and right behind it, it said ‘text first’.” Other basic etiquette issues as it relates to application process emerged, with some of the following examples: “setting up the interview, getting there on time, and being professional during the interview,” it’s the simple things like your handshake,” and “taking time to complete the application properly and not just the resume is key.”

On the other hand, many participants discussed the intentional creation of promotional ladders and tracks at their companies to attract recent college graduates to their positions. Amy said, “we are currently creating pathways for our interns so that they know what their next steps would be at our company.” Others said similar things like, “Before I hire a student, I can tell them what their next step will be” and “we have promotional ladders publicly available on our website.”

*RQ3 - How do hiring managers perceive the opportunities associated with hiring college students in the area?*

Participants’ were quick to offer suggestions to use to hire college students. Suggestions heavily related to discussing the role a university or college can take in the process. 10 out of 16



participants discussed the active role faculty and academics can take in the process, from letting employers into their classrooms to offering specific career management courses that are required curriculum for students. Some specific responses included, “let employers come into classes more,” “getting students out of the classroom more and to an employer,” “partnering more with local companies to integrate business technology into the classroom,” and “offering those general classes, one each semester, that covers topics like Excel and stuff.”

The heart of the opportunities discussed were related to partnerships and collaboration between the business community and universities. Lucy explained, “I think us as a business needs to be clear and concise on what we are looking for. And then we are prepared to answer the question from universities asking ‘what are you looking for?’ Making sure the right partnerships are in place.” Additional comments on partnerships include, “collaboration and communication,” “leveraging a partnership to build curriculum,” and “partnering with more companies to recruit and share resources.”

### **Differences**

No differences in the responses based on years’ experience or gender of the participants. An example of this emerged when discussing the process an applicant would undergo when being hired. All 16 participants discussed their processes and individual perceptions, with all of them involving a pre-screen and interview process.

When comparing data and results, the largest differences were observed in how participants discussed who had the responsibility of addressing the skills gaps. Organizations, universities, communities, and individual students were all mentioned by all 16 of the participants as it relates to who has the responsibility of capitalizing on those opportunities in

hiring recent college graduates. Table 3 illustrates the responses from each participant on who should take responsibility.

Table 3

*Who Should Take Responsibility for the Skills Gap*

Name	Quote
Allie	“It’s really a partnership from employers and the university, and building that within the curriculum.”
Ruby	“Everybody involved.”
Michelle	“Employers and career centers should unite and partner together.”
Lucy	“I think it’s everybody’s really.”
Jan	“Employers and universities need to connect more.”
Samantha	“Shared responsibility between the educators and businesses.”
Tammy	“It’s a 3-way street of employers, universities and the students.”
Larry	“I think employers have the responsibility.”
Kim	“A partnership between business and university.”
Steve	“Employers and career centers should unite and partner together.”
Amy	“It’s a mix.”
Molly	“It’s on both of us.”
Roxanne	“It’s a partnership.”
Laura	“It’s got to be a while community effort.”
Ann	“A lot falls on the individual students to ensure they are getting the appropriate experiences.”

The findings of the study revealed how the five themes were developed: corporate strategy, role of a university, experience, applicant skills, and career management, assisted in answering the research questions. No major differences were revealed when comparing responses based on the gender or years of experience between the participants. Comments did vary between the participants based on who should take the responsibility to capitalize on identified opportunities to close the skills gap. In the final chapter, relationships to previous research, implications for practice, and recommendations for future research are discussed.

## Chapter 6

### Recommendations for Future Research

#### Introduction

In this chapter, the purpose of the study, the relationship to prior research, the implications for practice, and recommendations for future research are presented.

#### Purpose of the Study

The purpose of the study was to explore employer perceptions of the skills gap in a Midwestern, metropolitan area. Building on the literature review and conceptual framework of career readiness, I studied, analyzed, and compared the similarities and differences in employer perceptions as it related to hiring recent college graduates in a Midwestern, metropolitan area. The findings of the study can lead to stronger partnerships between employers and universities and enhanced services for college students.

#### Prior Research

For this study, 16 managers and recruiters were interviewed to discuss their perceptions on the skills gap with recent college graduates. Most research done previously focused on a survey or quantitative approach and did not include hiring managers or recruiters. Intervention strategies were prevalent in the literature. Jason & Wilson (2016) studied 480 undergraduate students and assessed their learning through a work-integrated learning program. Rao (2015) looked at perceptions of students and career counselors on marketability of students through a specific intervention strategy, using de Bono's Six Thinking Skills and Covey's 7 Habits. Finally, Hodge & Lear (2011) compared perceptions of 254 upper-level business students and 37 business faculty members on employment skills needed for the workplace. This was completed

through quantitative survey responses. These findings are important and yet demonstrate a missing voice of the hiring manager and recruiter in the conversation on the skills gap.

Previous research focused on specific academic disciplines, most commonly business and IT. Those two disciplines were discussed extensively in this study. Business and IT academic programs are most desirable among those companies that participated in this study. Kleckner & Marshall (2014), Thomson (2017), Sarea & Fatema (2014), and Martin & Alleyne (2017) all address business needs specifically that employers are looking for in recent college graduates.

Other research, more longitudinal and quantitative in design, discussed specific skills that are being referred to in the skills gap conversation. According to the Bridging the Gap (2017) NACE report, up-to-date technical expertise, strong work ethic/habits, lifelong learning, and problem-solving are the overarching skills referred to in the skills gap umbrella. Many of those skills emerged through this study with a more specific focus being on up-to-date technical expertise and work habits.

### **Implications for Practice**

The findings of this study are consistent with some of the available research and quantitative studies existing on the perceptions of the skills gap with recent college graduates. Based on the information that was reported during this study, the following recommendations for employers and university professionals are presented.

Employers and universities should have formal relationships in place in order to connect students to opportunities and to ensure the students are job ready. The participants described aspects of what this partnership could look like, offering a quarterly or bi-yearly meeting to openly discuss strategies. In addition to suggestions, participants also recognized the responsibility lies on multiple people to close the skills gap. Employers and universities alike

should place a high priority on these relationships and ensure that there are resources, time, and people in place to make them happen. Hora (2017) underscored this sentiment and said there is a need for everyone to invest in this issue to best allow a skills infrastructure to be created, rather than it just being stand-alone programs within universities.

Both universities and employers should consider offering courses related to Microsoft Word, Excel, Outlook and PowerPoint. This could be accomplished through an on-boarding experience or even be a part of a general education curriculum at a university. This need should evolve annually as the basic technologies used may change over time. If employers or universities cannot teach this course in-person, an online or alternate delivery should be considered. Participants from this study mentioned partnerships with online learning companies like LinkedIn learning and also suggested courses be offered in a variety of modalities compared to the standard semester.. This could also be in a work-integrated learning (WIL) approach like Jackson & Wilton (2016) described in their study on the effectiveness of a WIL program on 480 business students.

Craig (2016) suggested that employers hire less based on the technical capability and more based on the potential for learning. This was in reference to his study that demonstrated the success of a pathway intermediary between college graduates and their first job, arguing that the intermediary would be best positioned to address the specific skills that are missing for that job and industry. With this in mind, it would be beneficial to explore an investment in intermediary roles, especially for highly desired positions. The needs of companies all are so different, so an intermediary would ensure that the needs are met for both the recent college graduates and the company.

Internships and experiences are immensely important in the conversation of skills gaps. Universities and colleges need to invest in creating more internship and “on the job” experiences for students. Participants in this study discussed repeatedly the strength in recent college graduate hires that had these internship experiences compared to those that don’t. Creating these experiences could look a lot of different ways. Universities could help educate employers on how to create strong and attractive internships for college graduates. Universities could also require internship experiences as a part of the degree requirements for graduation.

### **Future Research**

Few research studies exist on the perception of the skills gap with recent college graduates. Continued study, especially with hiring managers and recruiters, is important as these individuals are the gatekeepers in hiring top talent in companies. In recognition that these perceptions have differed based on the audience and that market needs evolve over time, it is critical to study this routinely for a deeper understanding. An observation related to the participants in this study related to the job description of hiring managers and recruiters. All participants in this study recruited for multiple positions within their respective companies, sometimes including multiple industries, which was contrary to the initial assumption that there may be recruiters that focused on specific industries, for example, supply chain management.

An additional area of exploration would be the role of formal employer partnerships between universities and employers and how that role affects the skills gap conversation. The perceptions of these employers that already have a direct and financial tie with local universities for recruitment of recent college graduates would be important and possibly different than hiring managers and recruiters.

An additional area to explore would be industries. As the literature currently stands, a lot of work has been done quantitatively to measure skills gaps related to specific business and IT professions. Targeting missing industries would be a valuable addition to the literature. Participant recruitment would be critical for this because many talent acquisition professionals recruit for more than one role and may be looking at expanding the participant pool.

The student voice is another opportunity for future research as it relates to the skills gap. While the literature presents the existence of some technical skills gaps through surveys and assessments, the student voice is missing. Having jobs versus being prepared for the job are two different things and more emphasis could be placed on the job preparation and career readiness.



## References

- Ali, J., Eam, L. H., Ismail, R., Rahim, F. A., Isa, F. M., & Ismail, I. A. (2014). The Effectiveness of finishing school programmes from the perspectives of graduates and employers. *Malaysian Journal of Learning and Instruction*, 11, 147–170.
- Alshare, K., & Sewailem, M. F. (2018). A gap analysis of business students' skills in the 21st century: a case study of Qatar. *Academy of Educational Leadership Journal*, 22(1), 1–22.
- Baird, A. M. (2016). 21st Century workforce: employers' ratings of importance and satisfaction of skills and competencies college graduates need to get hired in the northeast. *Johnson & Wales University*. Retrieved from <http://0.search.proquest.com/pqdt/docview/1864688791/abstract/5B956D8CEA8E471CPQ/5>
- Bharathi, V. A. (2016). Communication skills-core of employability skills: issues and concerns. *Higher Learning Research Communications*, 6(4), 12.
- Bradley, S., Kirby, E., & Madriaga, M. (2015). What students value as inspirational and transformative teaching. *Innovations in Education and Teaching International*, 52(3), 231–242.
- Cappelli, P. (2012). Why good people can't get jobs: The skills gap and what companies can do about it. *Wharton Digital Press*.
- Cappelli, P. H. (2015). Skill gaps, skill shortages, and skill mismatches: Evidence and Arguments for the United States. *ILR Review*, 68(2), 251–290. <https://doi.org/10.1177/0019793914564961>
- Chan, S.J., & Lin, J.W. (2016). Aiming for better employment: A Holistic analysis from admission to labour market. *Journal of Higher Education Policy and Management*, 38(3), 282–296.
- Clark, H. (2013). A comprehensive framework for measuring skills gaps and determining work readiness. *Employment Relations Today (Wiley)*, 40(3), 1–11. <https://doi.org/10.1002/ert.21416>

- Clay, P., & George, D. (2014). Competency skills gap assessment - why it matters to you. *Armed Forces Comptroller*, 59(1), 25–28.
- Craig, R. (2016). Providing students with pathways to high-value careers. *Change*, 48(5), 58–63.  
<https://doi.org/10.1080/00091383.2016.1227677>
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Creswell, J.W. (2016). *30 Essential skills for the qualitative researcher*. Thousand Oaks, CA: Sage Publications.
- D'Eloia, M. H., & Fulthorp, K. (2016). Preparing for the profession: Practitioner perceptions of college student preparedness for entry-level, full-time employment in municipal recreation agencies. *Schole: A Journal of Leisure Studies and Recreation Education*, 31(1), 15–28.
- Fan, C. S., Wei, X., & Zhang, J. (2017). Soft skills, hard skills, and the black/white wage gap. *Economic Inquiry*, 55(2), 1032–1053. <https://doi.org/10.1111/ecin.12406>
- Gorman, M. F. (2011). A case study in effectively bridging the business skills gap for the information technology professional. *Journal of Education for Business*, 86(1), 17–24.  
<https://doi.org/10.1080/08832321003663348>
- Gunderson, M. A., Detre, J. D., Briggeman, B. C., & Wilson, C. A. (2011). Ag lending: the next generation. *Agricultural Finance Review*, 71(3), 280–294.  
<https://doi.org/10.1108/00021461111177576>
- Ho, H.-F. (2015). Matching university graduates' competences with employers' needs in Taiwan. *International Education Studies*, 8(4), 122–133.
- Hodge, K. A., & Lear, J. L. (2011). Employment skills for 21st century workplace: The gap between faculty and student perceptions. *Journal of Career and Technical Education*, 26(2), 28–41.

- Howcroft, D. (2017). Graduates' vocational skills for the management accountancy profession: exploring the accounting education expectation-performance gap. *Accounting Education*, 26(5), 23.
- Huie, F. C., Winsler, A., & Kitsantas, A. (2014). Employment and first-year college achievement: The role of self-regulation and motivation. *Journal of Education and Work*, 27(1), 110–135.
- Hurrell, S. A. (2016). Rethinking the soft skills deficit blame game: Employers, skills withdrawal and the reporting of soft skills gaps. *Human Relations*, 69(3), 605–628.  
<https://doi.org/10.1177/0018726715591636>
- Iyer, T. (2014). Role of industry-academia interface for filling the skill gap. *CLEAR International Journal of Research in Commerce & Management*, 5(3), 52–54.
- Jackson, D. (2010). An international profile of industry-relevant competencies and skill gaps in modern graduates. *International Journal of Management Education (Oxford Brookes University)*, 8(3), 29–58. <https://doi.org/10.3794/ijme.83.288>
- Jackson, D., & Chapman, E. (2012). Non-technical skill gaps in Australian business graduates. *Education & Training*, 54(2), 19.
- Jones, E. A., & And Others. (1995). National assessment of college student learning: Identifying college graduates' essential skills in writing, speech and listening, and critical thinking. *Final Project Report*. Retrieved from <https://eric.ed.gov/?id=ED383255>
- Jones, R. (2014). Bridging the gap: Engaging in scholarship with Accountancy employers to enhance understanding of skills development and employability. *Accounting Education*, 23(6), 527–541.  
<https://doi.org/10.1080/09639284.2014.965959>

- Jordan, C., & Bak, O. (2016). The growing scale and scope of the supply chain: a reflection on supply chain graduate skills. *Supply Chain Management*, 21(5), 610–626. <https://doi.org/10.1108/SCM-02-2016-0059>
- Kleckner, M. J., & Marshall, C. R. (2014). Critical communication skills: Developing course competencies to meet workforce needs. *Journal for Research in Business Education*, 56(2), 59–81.
- Kochan, T., Finegold, D., & Osterman, P. (n.d.). Who Can Fix the “Middle-Skills” Gap?, 10.
- Landrum, R. E., Hettich, P. I., & Wilner, A. (2010). Alumni perceptions of workforce readiness. *Teaching of Psychology*. <https://doi.org/10.1080/00986281003626912>
- Lightweis, S. (2014). Bridging the gap between Accounting students and the profession: A case study. *Higher Education Studies*, 4(5), 18–27.
- Lim, N.C. (2015). Towards an integrated academic assessment: Closing employers’ expectations? *Education & Training*, 57(2), 148–169.
- López-Moreno, C. (2017). The Year abroad: Understanding the employability skills of the global graduate. Retrieved from <https://search.proquest.com/eric/docview/1913348985/17189F230BE34080PQ/18>
- Low, M., Botes, V., Rue, D. D., & Allen, J. (2016). Accounting employers’ expectations--The ideal Accounting graduates. *E-Journal of Business Education and Scholarship of Teaching*, 10(1).
- Malik, G., & Venkatraman, A. (2017). “The great divide”: skill gap between the employer’s expectations and skills possessed by employees. *Industrial & Commercial Training*, 49(4), 175–182. <https://doi.org/10.1108/ICT-11-2016-0071>
- Martin, J., & Alleyne, E. (2017). 8 Steps to overcoming the skills gap when hiring entry-level Accountants. *Strategic Finance*.

Martz, B., Hughes, J., & Braun, F. (2017). Creativity and problem-solving: Closing the skills gap.

*Journal of Computer Information Systems*, 57(1).

<https://doi.org/10.1080/08874417.2016.1181492>

McDonough, T. (2017). Closing the skills gap: Key learnings for employers and job seekers.

*Employment Relations Today (Wiley)*, 43(4). <https://doi.org/10.1002/ert.21602>

McGuinness, S., & Ortiz, L. (2016). Skill gaps in the workplace: measurement, determinants and

impacts. *Industrial Relations Journal*, 47(3), 253–278. <https://doi.org/10.1111/irj.12136>

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco,

CA: Jossey-Bass.

Michalak, R., Rysavy, M. D. T., & Wessel, A. (2017). Students' perceptions of their information

literacy skills: the confidence gap between male and female international graduate students.

*Journal of Academic Librarianship*, 43(2), 100–104. <https://doi.org/10.1016/j.acalib.2017.02.003>

Miller, S. (2014). Collaborative approaches needed to close the big data skills gap. *Journal of*

*Organization Design*, 3(1). <https://doi.org/10.7146/jod.3.1.9823>

Mohammad Akhriza, T., Ma, Y., & Li, J. (2017). Revealing the gap between skills of students and the

evolving skills required by the industry of information and communication technology.

*International Journal of Software Engineering & Knowledge Engineering*, 27(5).

<https://doi.org/10.1142/S0218194017500255>

Olson, M. (2015). A multilateral approach to bridging the global skills gap. *Cornell HR Review*, 1–5.

Patacsil, F. F., & Tablatin, C. L. S. (2017). Exploring the importance of soft and hard skills as

perceived by IT internship students and industry: A gap analysis. *Journal of Technology and*

*Science Education*, 7(3), 347–368.

- Raina, N. (2013). Skilling initiatives for undergraduate students at the entry level: A case study. *Journal of Commerce & Management Thought*, 4(4), 843–853.
- Rao, H. (2015). Workers can't find jobs, jobs can't find workers: Solving the talent paradox. *Journal for Leadership and Instruction*, 14(2), 12–17.
- Sarea, A. M., & Fatema Ebrahim, A. (2014). Bridging the gap between the perceptions of Accounting students and Accounting practitioners: Evidence from Ahlia. *University of Bahrain*. 10(4), 723–740.
- Schwalje, W. A. (2011). The prevalence and impact of skills gaps on Latin America and the Caribbean. *La Prevalencia y El Impacto de La Brecha de Habilidades En América Latina y El Caribe.*, 5(1), 16–30. <https://doi.org/10.3232/GCG.2011.V5.N1.01>
- Shipp, B. P., & Howard, R. L. (2013). Unemployment and job creation programs: Is there a skills gap? *Review of Business*, 33(2), 103–118.
- Singh, M., & Sharma, M. K. (2014). Bridging the skills gap: Strategies and solutions. *IUP Journal of Soft Skills*, 8(1), 27–33.
- Starkweather, R. (2012). Determining HR knowledge, skill, and ability (ksa) gaps through interaction with the organizational talent pool. *Cornell HR Review*, 1–4.
- Thomson, J. (2017). Is the Accounting profession committed to closing the skills gap? *CPA Journal*, 87(9), 16–17.
- Trajanoska, N., & Kostovski, N. (2016). Importance-performance gaps in skills and knowledge of junior management and staff in tourism and hospitality industry in Republic of Macedonia. *Journal of Sustainable Development (1857-8519)*, 5(14), 68–80.

Wielkiewicz, R. M., & Meuwissen, A. S. (2014). A lifelong learning scale for research and evaluation of teaching and curricular effectiveness. *Teaching of Psychology, 41*(3), 220–227.

<https://doi.org/10.1177/0098628314537971>

Wolff, R., & Booth, M. (2017). Bridging the gap: Creating a new approach for assuring 21st century employability skills. *Change: The Magazine of Higher Learning, 49*(6), 51–54.

*Appendix A***Interview Protocol**

1. Would you describe your work at \_\_\_\_\_ company? How long have you been recruiting for your company?
2. Describe the employee hiring process you use for college recruiting.
3. How does this process differ from other types of employee recruiting?
4. How do your hiring processes and techniques evolve each year?
  - a. Is there a system in place for evaluation? If so, describe that system.
5. What comes to mind when you hear the term “skills gap”?
6. What skills gaps exist in hiring college graduates?
7. Are there gaps unique to the metropolitan area? If so, what are those gaps?
8. Who should take responsibility for addressing these gaps?
9. How many college students did you hire in the past year?
10. What differences exist in the college students’ skills?
11. Which academic programs are your targets for employment?
12. What are the biggest challenges you face hiring college students?
13. What strategies do you use to address those challenges?
14. Have there been any surprises about hiring college students that you didn’t expect?
  - a. If yes, what kinds of surprises?
15. What opportunities exist in the area to close the skills gap between college graduates and employers?
16. What can your organization do to close the skills gap?
17. What can universities and colleges do to close the skills gap?
18. Do you have anything else you would like to add?



*Appendix B***Participant Informed Consent Form****University of Nebraska – Lincoln****Title:**

IRB #: 18583

Employer Reports of Skills Gaps in the Workforce

**Purpose:**

The purpose of this study is to explore employer perceptions of the skills gap in a Midwestern, metropolitan area. You are invited to participate in this study because of your role in hiring new college graduates at your company.

**Procedures:**

You will be asked questions about your skills gap perspectives as one of the hiring managers recruiting college students at your organization. Questions will involve your background in hiring, your perspectives on work readiness, common challenges you face, and opportunities that exist to combat these hiring challenges. The interview for this study is scheduled to last approximately 1 hour and will be conducted at your organization in the private space of your choosing. A private office or conference room is likely the best location for this study.

**Benefits:**

You will be able to reflect on your experience as a hiring manager and think about the skills college graduates need to succeed at your organization. There is little research that involves the in-depth nature of a hiring manager's understanding about the skills gap in this area.

**Risks and/or Discomforts:**

There are no known risks or discomforts associated with this research.

**Audio Recorded:**

Interviews will be audio recorded in order to be transcribed.

**Confidentiality:**

Any information obtained during this study which could identify you will be kept strictly confidential. The data will be stored on the investigator's password protected computer and will only be seen by the investigator during the study and for 5 years after the study is complete. The information obtained in this study may be published in scientific journals or presented at scientific meetings but the data will be reported as aggregated data. Direct quotes may be used

from you but will be attributed with a pseudonym. Data from your interview will not be seen by anyone other than my doctoral advisor.

**Opportunity to Ask Questions:**

You may ask any questions concerning this research and have those questions answered before agreeing to participate in or during this study. Or you may contact the investigator(s) at the phone number below. Please contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6965 to voice concerns about the research or if you have any questions about your rights as a research participant.

**Freedom to Withdraw:**

You are free to decide not to participate in this study. You can also withdraw at any time without harming your relationship with the researchers of the University of Nebraska-Lincoln.

**Consent, Right to Receive a Copy:**

You are voluntarily making a decision whether or not to participate in this research study. Your participation in the interview certifies that you have decided to participate having read and understood the information presented. You are encouraged to keep the electronic copy of this consent form attached to the recruitment email for your records.

The University of Nebraska-Lincoln wants to know about your research experience. This 14 question, multiple-choice survey is anonymous. This survey should be completed after your participation in this research. Please complete this optional online survey at:

<http://bit.ly/UNLresearchfeedback>

**Signature of Participant:**

\_\_\_\_\_  
Signature of Research Participant

\_\_\_\_\_  
Date

**Name and Phone number of investigators**

Sammi Kaiser, PhD Candidate, Primary Investigator

Cell Phone: (719) 510-1028

Dr. Marilyn Grady, Secondary Investigator

Cell Phone: (402) 450-2504

*Appendix C***Recruitment Email**

Dear (Name),

I am currently conducting a study exploring the perceptions of the skills gap in college graduates. You are invited to participate in this study because of your role in hiring new college graduates at your company.

You will be asked questions about your skills gap perspectives as one of the hiring managers recruiting college students at your organization. Questions will involve your background in hiring, your perspectives on work readiness, common challenges you face, and opportunities that exist to combat these hiring challenges. The interview for this study is scheduled to last approximately 1 hour and will be conducted at your organization in a private space of your choosing.

Would you be willing to participate in an interview? If so, please contact me at [sammikkaiser@gmail.com](mailto:sammikkaiser@gmail.com) or at (719) 510-1028 to schedule an interview time. I can also answer any remaining questions you may have about the study.

Thanks for your consideration and have a great day!

Sincerely,  
Sammi Kaiser