THE NECESSITY OF NUANCE IN EDUCATION: EXPLORING THE NEED FOR THE EXPLICIT TEACHING OF SOFT SKILLS

AT THE HIGH SCHOOL LEVEL

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DISSERTATION ABSTRACT

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High school students depend on school to provide the skills needed to attend a post-secondary institution or enter the work force directly upon graduation. However, high school curriculum standards may not align with the skillset demanded of the students post-high school.

In prioritizing skills by curriculum standards, schools inevitably privilege certain skills and oppress others, creating hierarchies of importance that are predominantly weighted towards "cognitive/hard" skills as opposed to "non-cognitive/soft" skills. Based on post-high school demand from colleges/universities and professional settings, evidence suggests that the K-12 system, and especially the high school level, may benefit from a shift in the prioritization of hard skills towards soft skills. This descriptive study explored the necessity of the explicit teaching of soft skills at the high school level for the employability and subsequent internal promotability of graduating high school students by analyzing the perceptions of elementary, middle, and high school teachers alongside the perceptions of employers. The perceptions of individual teacher groups at different levels of the K-12 "education chain" allowed for analysis of some of the possible gaps in current prescribed-curriculum skill alignment. The perceptions of employers allowed for

an analysis of skill demand post-high school in comparison to the K-12 prescribedcurriculum. In essence, this study provides a clearer picture as to where there might be possible gaps in curriculum for students that affect their employability after graduation.

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TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION AND REVIEW OF LITERATURE	1
Success' Connection with Teaching of Skills	2
Contextualizing the American Education "Chain" within Post- High School Systems	4
The Problem in Defining "Soft Skills"	5
Demand for Soft Skills	8
Soft Skills' Contributions to Success	10
Teaching Soft Skills	13
A Note on High School Curriculum Reform	15
Intersectionality as a Possible Conduit for Soft Skills Curriculum	17
Intersectionality in Education and the Workplace	19
II. METHOD	22
Research Design	22
Setting and Participants	24
Educator Sample	24
Employer Sample	25
Instrumentation	27
Survey Instrument	28
Semi-Structured Interview Protocol	28
Data Analysis	29
Quantitative Data: Quantitative Analysis	29

Qualitative Data: Thematic Analysis	30
Threats to Validity	31
III. RESULTS	33
Interviews	33
Ability/Willingness to Learn	34
Character/Work Ethic	36
Teamwork/Communication	40
Leadership/Communication	43
Survey	45
Quantitative Rank Order Analysis	45
Survey Qualitative Thematic Analysis	48
Question 4	49
Lifelong/Versatile Learning Skills	49
Knowledge of/Evaluation of Self	51
Decision-Making/Problem Solving	52
Communication	53
Question 5	54
What Works in CCSS?	55
What Does Not Work in CCSS?	55
What Can Be Improved?	56
Questions 7 and 8	57
Empathy through Soft Skills	57
IV. DISCUSSION	58

Limitations	58
Key Takeaways from This Study	58
Findings Related to the Interviews, Specifically	59
Findings from the Survey Quantitative Analysis, Specifically	63
Findings from the Survey Qualitative Analysis, Specifically	67
Cross-Cutting Findings of the Study as a Whole	68
Implications	70
APPENDICES	74
A. TEACHER SURVEY	74
B. INTERVIEW PROTOCOL	76
REFERENCES CITED	80

LIST OF TABLES

Ta	ble	Page
1.	Thematic Analysis Framework	30
2.	Top Four Ranked Skills and their Means	45
3.	Middle Three Ranked Skills and their Means	46
4.	Bottom Four Ranked Skills and their Means	47

CHAPTER I

INTRODUCTION AND REVIEW OF LITERATURE

When most people think about what was required of them during their time in high school in the United States, they think about the subjects of math and English. This would make sense, as these two subjects have been used as measures of career and college readiness for decades in America formally and longer still informally. In the same vein, the most common refrain heard from kids in school concerning these two subjects is "when am I going to use this in real life?"

It is easy to dismiss these questions from kids. As adults, we can now extrapolate the plethora of ways we use our math and English skills, albeit often indirectly, throughout our daily lives. However, perhaps dismissing those "childish" questions is shortsighted. Every system needs a purpose. Often, the system is created specifically to fulfill that purpose, and the system can therefore be audited based on its alignment with its purpose. If it aligns closely, then the system is working. If it aligns poorly, then we can posit that the system either needs to be replaced or reformed in ways that will more closely align the system with its purpose. Public education in America, in this case the kindergarten through 12th grade (K-12) public school system, is vastly intricate. If it is functioning as intended, it will align with its intended purpose as any system should, regardless of its complexity. Furthermore, the more those involved with the K-12 system are aware of, agree with, and work toward that shared purpose, the better the system will function.

Based on the connections between post-high school educational institutions (HEIs) and the post-high school workforce, much of the language associated with high schools—high schools in particular as they are the end of the "K-12 Education Chain"—is that they are geared towards "college and career readiness." As will be discussed later in this paper, terms such as "readiness" run the risk of differing interpretations, and the larger the system, the more those differences in interpretations can affect the end-"product" of that education chain: the student. Does readiness mean *the ability to be admitted to a university* or *the ability to be hired with entry level skills into a career*? Or does readiness imply *an ability to thrive within the university or workplace to which one is admitted/hired*? For example, does readiness mean that a student is able to digest and master more complex subject content or is the goal for them to be internally promoted in a career? For this paper, I will use this second interpretation as the basis for readiness and thus as the basis for the purpose of K-12 education. "College and Career Readiness," that elusive phrase, can be viewed as the degree to which students experience "future success."

Success' Connection with Teaching of Skills

K-12 education in its simplest form operates by teaching skills and then measuring students' proficiency with those skills. If we were to follow the earlier prescribed model of a system as working towards a purpose, the skills that are taught should function as the devices of future success. Then why are the skills which are viewed as primary measures of career and college readiness, specifically math and English, so difficult to apply directly?

Educators ponder this question daily within the classroom as they create their curriculum and attempt to generate student buy-in, yet the current valuing of English and math limits the ability of educators to provide students with an adequate answer. When something is made primary, something else, by definition, is made secondary. In the classroom, the value of something is based on the amount of time spent on it. Time spent is based on both the teacher's and system's perceptions of what skills are most important to know for future success, but it is

difficult to tell how much that conversation is happening throughout the K-12 system and the degree to which the values of skills are interpreted differently by different people. If two instructors at the same grade level, teaching the same subject, interpret future success as "the ability to know ________ skill" and each of them insert a different skill into the blank, the resulting created curriculums can drastically diverge based on time allotted in the classroom. For example, if one English teacher values technical writing and another values public speaking above all else, the amount of time in their classrooms spent on each of these English subskills will vary widely, and the students will leave their classes with very different levels of those subskills. Multiply that divergence across a high school of two thousand students with dozens of teachers and subjects taught, or across a district with multiple high schools, or across a state with hundreds of high schools, or across a nation with over 23,000 high schools, and we begin to see the extent of the weight of interpretation on education (nces.ed.gov).

None of this is to argue for creating a system in which the exact same amounts of time are prescribed for every teacher and every student, but to suggest that the success of standardized curriculum correlates with those within the system buying into shared definitions of purpose and skill value. To value properly the skills of utmost importance towards future success, an evaluation of skills must be conducted, and much of that evaluation requires contextualizing the K-12 education system within the systems its students must enter post-high school to determine what those systems demand from students, skill-wise.

Contextualizing the American Education "Chain" within Post-High School Systems

So far, I have mostly discussed the K-12 system as a single entity with a singular purpose. However, the references specific to high school hint towards K-12 being closer to a conglomerate entity with sub-purposes. Schools have been subdivided for decades into

elementary, middle, and high school systems that group students into grades based on age, and I would posit, perceived shared purpose. It is difficult to contextualize a six-year-old's "future success" when applied to that same six-year-old as a graduating senior; there are so many intermediary steps between the start of formal schooling and graduation from high school. However, if the elementary system has a shared vision of what skills a kindergartener needs to be successful in a first-grade class, and a second-grade class, and so on, then we can extrapolate the entire K-12 education chain with goals and sub-goals for skills at different levels. It's no wonder that this twelve-year-long game of telephone played by thousands of individuals trying to communicate needs and values to each other can result in mixed messages and confusion about the most important skills to develop at specific grade levels in the short term (a school year, for example) and in congruence with the long term (the entirety of the K-12 education chain).

And where is the K-12 system, with all its elementary, middle, and high school subsystems, acquiring its information on what each student will need to know post-high school in order to achieve future success? Here is where things get really complicated. K-12 must react to what it *perceives* students will need to know post-high school, which means communicating with higher education and the professional world to determine what skills are demanded in those spaces. As will be discussed later in this paper, the current conversations taking place, which could also be criticized based on their inadequacies of occasion, are not using shared language or shared definitions. Therefore, it is possible—even likely—that the K-12 conglomerate is not interpreting the needs of these post-high school spaces accurately and thus unable to plan their curriculum accordingly.

The Problem in Defining "Soft Skills"

For my initial search for a soft skills definition, I utilized the University of Oregon library database, Google Scholar, and ERIC for government documents and reports, book chapters, and peer-reviewed journal articles. The scope of the challenge of determining a consensus definition is apparent in the search results from each of these engines. By itself, without Boolean operators placed on the terminology before searching, each of these databases yielded thousands of results, with Google Scholar's total being the highest at 958,000. When adjusted to the specific phrasing of "soft skills definition," the results were much more manageable, ranging between 30-130 (with Google Scholar once again at the high end of the three search engines used). An examination of the articles from this more specific search illustrates the term's applicability and versatility across disciplines.

In their base form, soft skills indicate the competences indirectly related to a specific task such as interpersonal relationships, communication, and collaboration; in essence, everything that goes into completing a task besides the skill to do the task itself, especially when coordination with another individual is concerned (Cimatti, 2016). However, constructing a list using this definition is difficult. Is "Communication" its own skill category with "non-verbal" and "verbal" listed as subcategories, or is "Communication" a subcategory of "Interpersonal skills?" Soft skills may be distinct, overlap, work in a complementary manner, or even oppose one another, and thus, categorizing them in any universal way is not only complex but inherently context dependent.

The term itself may be part of the problem, in that the word "soft" provides a loaded connotation, diminishing the perceived value of these skills. Instead, a reframing may be needed that reflects the importance of these key skills (Parlamis & Monnot, 2019). "Non-cognitive" is often used in place of "soft skills" but has similar negative connotations. Non-cognitive skills

are, by definition, those that are not cognitive, rooted in what they are not. As with soft skills being "those that are not hard skills," this dichotomous relationship creates, encourages, and proliferates otherness and deficit-based mindsets, centering the conversations on what these skills are not, rather than what they are. However, based on current literature, it is clear, ironically, that a consensus for what to call these skills has not yet been reached. Instead of muddying the discussion further by creating new terminology to define the umbrella of these skills, I will use both "soft skills" and "non-cognitive skills" as these are currently the most used terms, with the caveat that using these terms as such in this paper is not an endorsement of them.

As stated previously, the list of skills that fall under the umbrella of soft skills is massive. Soft skills' abstract nature presents problems of categorization because many categories interchange, as illustrated previously with the term "communication." Researchers tend to avoid this problem by focusing on a handful of skills instead of a more exhaustive list. "Soft skills" as a term first appeared in 1974, in a report on leadership research for the U.S. Army. In this report, soft skills were defined as "important job-related skills that involve little or no interaction with machines and whose application on the job is quite generalized" (Whitmore, 1974, p. 4). Since this initial usage, the term has been defined in countless different ways. For example, Cimatti (2016) updated this definition to something closer to how the term is used in the modern sense, stating that soft skills are "used to indicate personal transversal competences" and then giving examples of these competences such as: "social aptitudes, language and communication capability, friendliness and ability of working in team and other personality traits that characterize relationships between people" (p. 98). No matter how they are defined, soft skills are always connected to their other, more accepted, and arguably easier to measure half: hard skills.

A through-line for the research surrounding soft skills that connects to research around hard skills is that they are both seeking an answer to the same question: Which skills contribute to success? In that sense, I am concerned with the skills that contribute to success that are not currently explicitly taught as stand-alone subjects under the Common Core State Standards. I will use the following as a working definition for **soft skills/non-cognitive skills**: *skills of communication, understanding, and leadership that influence decision-making, interpersonal interactions, and intrapersonal cognition*. In theory this should mean that there is a correlation between someone's soft skills improving and their relationships, decision-making, or leadership improving. This definition functions with the caveat that no definition of soft skills is all-encompassing but instead works as a filter through which to examine potential skills that might fall within these parameters. The most important properties of soft skills are their roles in interpersonal and intrapersonal dealings. Alongside a definition of **hard skills** as *specialized or task-specific skills*, there should be enough differentiation to be able to speak about both terms without significant problems of crossover.

Demand for Soft Skills

Under the scope of this definition of soft skills, the necessity, in theory at least, for teaching such skills should begin to emerge. However, a search of the literature is necessary to see to what extent and in what professional areas soft skills might apply. Because soft skills are not explicitly part of most high school course offerings, searching for how soft skills are taught does not provide an accurate view of the demand for them. Instead, I sought information about their value in the workplace. I conducted another search using the University of Oregon library database, Google Scholar, and ERIC for government documents and reports, book chapters, and peer-reviewed journal articles to determine the extent to which there was a demand for soft skills in the workplace. Using "soft skills in the workplace" and "demand for soft skills in the workplace" garnered tens of thousands of results in the UO library database and hundreds of thousands in both Google Scholar and ERIC, respectively. What follows is a synthesis of the most germane of these articles.

The National Association of Colleges and Employers (NACE) conducts a survey every year in which it asks employers for attributes they seek in a candidate's resume. In 2020, 14 of the 20 most sought-after skills fell under this paper's definition of soft skills: problem-solving, teamwork, work ethic, communication skills (verbal), leadership, initiative, detail-oriented, flexibility/adaptability, interpersonal, organizational, strategic planning, friendly/outgoing personality, risk-taking, tactfulness, and creativity (NACE, 2020). The first obvious hard skill listed is "technical skills," which ranked tenth. Historically, Charles Rigorb Mann did a study in 1918 of 30,000 members of four large engineering societies. The members were asked to number the six qualities needed for top engineers; the results were as follows: character, judgment, efficiency, understanding of others, knowledge, and technique (Mann, 1918). The first four of these fall within the definition of soft skills. Seeing two surveys over 100 years apart both showing evidence of the importance of soft skills speaks to the longevity of the demand for these skills regardless of changes in technology and society.

Another way that literature points toward the need for soft skills in the workplace is through studies researching how to integrate soft skills into various professional disciplines. This integration, along with the justification sections at the beginning of each of these papers, implies that the need is already established in the minds of many researchers. Zheng and Zhang (2015) redesigned the curriculum for an Informational Technology (IT) capstone course by integrating soft skills into a long-term project to address the importance placed on soft skills as a key factor

in hiring and career development in the industry. Robles (2012) used information gathered from business executives to substantiate the need for soft skills in general and then to determine the 10 most important soft skills desired of newly hired employees. Similar studies, looking at gaps in their respective industries, can be seen attempting to use soft skills to meet those gaps: mental health treatment through social functioning (Connor et al., 2020), managerial roles that require adaptability and self-learning (Sapovadia, 2020), and interpersonal skills for negotiation in law settings (Horton, 2016). The demand and subsequent efficacy of soft skills, when applied to areas of need, show a pattern of consistency in the literature, especially over the last ten years as more institutions look for new ways to address gaps in their employees' preparation and development on the job.

Soft Skills' Contributions to Success

At its core, the purpose of "education" is simply preparation for life events or stages. The skills and knowledge taught are meant to build upon and reinforce each other. Different levels of institutions, from pre-K to post-secondary, create layers of development, each level ideally preparing the student for subsequent levels. However, no matter how many levels are added, the goal remains the same: the all-encompassing and difficult to define notion of "success." Because of this model, education is often, if not always, reactionary to societal determinants of success¹. In America, success is often measured in job performance because it is assumed to correlate with production and promotion, thus linking it to profit and salary.

¹ The assumptions about which societal determinants the American education system reacts towards is not meant to be an oversimplification of the diverse cultures within the United States. First, the mention of "job performance" as a measurement of success that education then reacts to serves as an example of how broad assumptions can influence sweeping education policy. Later, this paper's focus on Intersectionality as a conduit for the teaching of soft skills addresses the importance of diversity of experience towards skill-building within education. A diversity of thought within education might mitigate the problems of misaligned curriculum created by oversimplifying or misrepresenting definitions of "success."

In the current system in America, education responds to the demands of the workplace in its broadest sense by tending to focus on skills commonly associated with job performance. However, understanding what skills lead to good job performance is a difficult task. For example, researchers have been looking at personnel assessment in regard to job performance for well over a hundred years (Mann, 1918). Early ideas about job specialization fed the narrative that hard skills should be prioritized. There was a traditional belief that between-job task differences meant that aptitude tests used in the hiring process or for job performance assessments once hired were only valid in job-specific circumstances. However, this narrative seems to be a misnomer in that "the moderating effect of tasks is negligible even when jobs differ grossly in task makeup" and "is probably nonexistent when task differences are less extreme" (Schmidt et al., 1981, p. 166). This finding diminishes the importance of job-specific hard skills and suggests that there might be certain other skills that are needed across the majority of professions. Keller (1997) looked into variables such as "job involvement" and "organizational commitment"-terms that align more with a soft skills criterion than a hard skills one-in a study of scientists and engineers and found that job involvement had direct effects with performance variables from the 1-year performance review conducted at the end of the study. In other words, variables such as community, loyalty, and dedication had a positive effect on job performance. This finding provides evidence of the importance of soft skills for job performance, even in fields that are traditionally viewed as technical and hard skill dominated.

To have success in a job, one must first be hired. Soft skills are prevalent in the hiring arena as well. An exploratory study of a *Principles of Marketing* course used "behaviorally anchored rating scales to tap soft and hard skills." Results indicated a "significant hierarchical effect of soft skills beyond hard skills on a candidate's likelihood of being invited back for a

second interview" (DeLong & Elbeck, 2018, p. 159). Similarly, a large-scale exploratory study examined the gap between perceptions and experiences of business school graduates who were newly employed and employers in four European countries: UK, Austria, Slovenia, and Romania. Consistently, between both the new employees looking back at what they wished their business schools taught and what the employers wished their new employees knew, teamworking skills and communication skills (both oral and written) were mentioned (Andrews & Higson, 2008). The "remarkably homogenous" findings across the four countries of the value of hard business skills alongside importance of soft business-related skills points towards the notion that the two skillsets should be valued equally in education settings.

Succi and Canovi (2019) conducted a similar study type across different European countries more recently and found similar results: "86% of respondents indicate an increased emphasis on soft skills over the last 5-10 years" (p. 1834). They also found a misalignment in that companies considered these soft skills more important than students/graduates did. A possible explanation for this difference in perception of the value of soft skills lies in the fact that students attend higher education institutions (HEIs) with the understanding that the degree they are working towards will provide them the skills they need for success in the workplace. Once in the workforce, the individual must acquire and develop the essential skills needed to adapt to a changing labor market, but if a business degree has merit, it should be rising to meet these changing standards and improve the student's future employability. Given the focus of their studies on hard skills, it is no wonder that students tended to value such skills over soft skills.

Studies such as these nudge HEIs to offer more training in soft skills. However, education is a connected process. As HEIs inevitably start to adjust their offerings to meet researchidentified needs by offering curriculum and courses geared around soft skills, this change creates

a widening gap between high school and HEIs. Many of the goals at the high school level are towards a traditional view of "college readiness," having mastered a sufficient number of hard skills. In the next section of this paper, I examine one of HEIs' responses to the soft skills gap and detail how it might function to fill the soft skills gap being perpetuated at the high school level.

Teaching Soft Skills

High schools often assume they are preparing their students for the abstract goal of "readiness" in either post-high school education or employment in the work force. With that in mind, it follows that high schools should react to the demands of post-high school placement of their students. College is one common post-high school destination. At the college level, research suggests that academic standards currently focus on the need for incoming students to possess adequate hard skills. This pattern is reflected in admissions processes that often use hard-skill dominant standardized tests or GPAs from core high school classes as determining factors for acceptance. Instead, research recommends that colleges expand the definition of adequacy, a term used similarly to the concept of "readiness" (Knoeppel et al., 2009). Weatherton and Schussler (2021) examined post-secondary science education through the lens of "student success." Like adequacy, "success" seems to be similar to readiness in that it is viewed as a goal of the institution and is similarly difficult to define. They further argue that the current definition of success (a) reinforces and reproduces social hierarchies, (b) hinders success for certain student populations, and (c) may not define success in the same way as the majority. If this seems like a confusing buffet of terminology that large institutions are struggling to define uniformly, then the abstractions and the problems of communication that they create in the education chain become more evident. For example, colleges have moved toward more equitable approaches to systemwide injustices that focus on identity, culture, interpersonal, and intrapersonal approaches. High schools, by our previously established definition of "career and college readiness," must then react to these collegiate curriculum changes if students entering college are going to be "ready."

The need for soft skills to be taught explicitly in high school curriculum cannot be disentangled from these concepts of readiness, adequacy, and success, as any conversation about curriculum must address the underlying goal of curriculum: learning what is *thought* to be needed. In that sense, part of the demand for a soft skills high school curriculum inevitably stems from post-high school institutions voicing, explicitly and implicitly, the importance of and/or gaps in soft skills in potential students or future employees.

As stated previously, the importance of and gaps in soft skills are readily apparent in the literature surrounding soft skills, particularly the versatility of soft skills application as a concept and lack of a consensus in its definition. In lieu of a definition, a general skill framework is deployed where soft skills are described but not readily quantified. Zhou (2017) focused on three non-cognitive skills: grit, self-control, and social skills. Caswell (2019), while developing a system for Problem-Based Learning (PBL), prioritized collaboration, agency, and metacognition as "the soft skills of PBL" (p. 2). In this sense, each soft skill functions as a color on an infinite spectrum, with the painter (the researcher in this metaphor) choosing combinations that depend on the picture they are creating.

In isolation, and in the short-term, this lack of a universal definition might seem liberating. For instance, most artists would not like to be limited to a specific color palette, if given the option. However, myriad problems arise without a specific consensus. This paper does not seek to address all these problems, nor does it seek to provide the one and only definition of the term for all industries. However, to understand whether soft skills should be taught explicitly

at the high school level, as is the goal of this dissertation study, I will use the aforementioned definition of soft skills as a starting point.

A Note on High School Curriculum Reform

The notion of curriculum reform is not necessarily a novel idea. As was mentioned in the literature synthesis, the demand from post-secondary institutions such as HEIs and employers for skills that they view as underdeveloped or lacking in incoming students or prospective employees exists (NACE, 2020). That demand for skills, and in particular soft skills, implies the need for curriculum reform. The Institute of Education Services, (IES) has funded multiple grants over the last ten plus years looking into the efficacy of different models for high schools such as Early College High Schools (ECHS) or "early colleges" and the STEM Early College Expansion Project (SECEP). The early college model seeks to integrate "practices designed to promote postsecondary success while combining the high school and college experience" and in doing so has shown positive correlations in enrollments in post-secondary education and likelihood of receiving associate degrees within six years of entering high school when compared to high school students in traditional high school settings (Edmunds et al., 2020). In this study, "postsecondary success" is defined differently than in this paper; "more formal education postsecondary" is implied to mean "more postsecondary success." Although it is possible that more formal education can lead to success in the way this paper is choosing to define the term employability and promotability-this nuanced difference in definition speaks to the necessity of communication in the K-12 education chain, and those whose research can affect future curriculum reform. These programs attempt to address the very real problem of education inflation, where the prescribed solution to gaps in education is more education. However, this

approach runs the risk of continuing the trend of devaluing the employability of the high school degree.

A curriculum reform that looks at the value of the skills being taught and reprioritizes skills that align with what research is showing post-high school institutions and organizations are wanting for acceptance and employability/promotability might be needed to affect education inflation. In this scenario, the overall goal of curriculum reform would be to emphasize the value of the K-12 education towards postsecondary success.

The value of the high school degree becomes even more paramount when considering different markers of equity in the public education system such as in special education. Gaps exist between youth with and without disabilities enrolling in higher education (National Center for Education Statistics, 2019) as well as with employability for those with and without disabilities who receive a bachelor's degree (Bureau of Labor Statistics, 2018): those with disabilities were "3 times less likely to be employed" (Mazzoti et al., p. 4, 2021; U.S. Bureau of Labor Statistics, 2018). Literature reviews by Test, Mazzotti, et al. (2009) and Mazzotti et al. (2016) identified twenty in-school predictors of post-high school success, all of which relate directly or tangentially to definitions of soft skills that align with this paper's definition of the term. For example, the Oregon Department of Education's "CTE Oregon Skill Sets" are divided into six categories: 1) Agriculture, Food and Natural Resource Systems, 2) Arts, Information and Communications, 3) Business and Management, 4) Health Sciences, 5) Human Resources, and 6) Industrial and Engineering Systems. Each of these divisions has a framework document listing the involved skills. In each of the framework documents, the first skillsets listed are "Employability Knowledge and Skills" that all learners are "expected to master...to function in the workplace" (oregon.gov). These listed skills include critical thinking, communication,

teamwork, and conflict resolution. When activities are broken down to their basest layers of skills, there seems to be a pattern: soft skills as equally if not more important than hard skills, even in something as technical as a CTE curriculum.

Intersectionality as a Possible Conduit for Soft Skills Curriculum

When something is made primary, something else, by definition, is made secondary. As discussed previously, teachers assign tasks which practice/measure skills in the classroom, and the amount of time spent on them speaks to a teacher's *actual* valuing of those skills towards a student's future success. In this study, I will examine teachers' *perceptions* of skill value to understand better how the education system communicates within the specific links in the chain (e.g., middle school teacher to middle school teacher) and across the chain (e.g., elementary teacher to high school teacher).

Intersectionality provides a strong identity-based framework for exploring and interrogating soft skills within their true-to-life contexts of power difference and otherness. Rooting soft skills within the framework of intersectionality could help to create shared, nuanced definitions from the onset of a proposed new soft skills curriculum.

The term "intersectionality" originates with Dr. Kimberlé Crenshaw (1989) who explained how a single-axis framework of either race or gender "erases Black women in the conceptualization, identification, and remediation of race and sex discrimination (p. 140). Traditionally, American society has found it difficult to look at people through more than one societal label simultaneously. Racism affects Black women differently than Black men because they are women, and sexism affects Black women differently than white women because they are also Black. Crenshaw realized that because Black women are a part of both discussions, they

are in many ways excluded from both when issues are considered separately, and for the majority of American history, issues of race and women's rights have been viewed separately.

Crenshaw named this paradox *intersectionality* decades ago. Though its original purpose was to address the marginalizing of Black women, intersectionality has now, based on its inherent versatility as a term, emerged in a number of discursive spaces, including teaching projects. At its core, intersectionality engages with dynamics of difference vs. sameness, rejects single axis thinking, and can be applied to almost any academic setting (Cho, Crenshaw & McCall, 2013). Difference vs. sameness and dynamics of power are prevalent everywhere in society, as is evident by intersectionality's transnational reach over the last decade (Robert & Yu 2018). Therefore, when returning to the previous question asked by so many high school students about how they will use their high school education in the future, intersectionality in education provides an explicit and direct connection to real-world applicability in a way that English and math cannot always readily provide.

At the college level, intersectionality has opened opportunities for analyses in many of the traditional liberal arts disciplines such as history, sociology, law, literature, philosophy, and anthropology as well as making contributions in emerging areas such as Feminist, Ethnic, and Queer studies (Cho, Crenshaw & McCall, 2013). Universities value concepts such as specialization based on specification, research based on pushing the current knowledge base forward, and demand from students/faculty based on job market and societal needs.

However, at the public high school level, the application of intersectionality is limited by the high school model, which is often determined by states' interpretation of the Common Core State Standards (CCSS). CCSS aims to standardize education based on specific college and career readiness skills. They are organized by grade level and subject matter. Although there are

standards that are not specifically linked to math and English, these two subject areas are prioritized in many ways, which is the reason this paper refers to high school as a "two-pronged" system. High schools use math and English test scores as benchmarks for growth and achievement. The majority of high stakes tests that determine funding, college acceptance, or in some cases, graduation benchmarks are rooted in measuring the math and English CCSS. Most high schools require more years of math and English than any other subject matter, emphasizing the degree to which they are valued (e.g., time spent is a proxy for determination of value). In turn, high school curriculum is weighted towards math and English, and thus weighted towards hard/cognitive skills. If one would like to include science and/or social studies as a third/fourth prong, a look at the subskills and standards for each subject would yield a similar weighting towards hard/cognitive skills.

Intersectionality in Education and the Workplace

To determine the prevalence and relevance of intersectionality in school and in the workplace and intersectionality's connection to soft skills, I conducted a literature search with both "intersectionality in education" and "intersectionality in the workplace" using the ERIC database. The resulting lists of results suggests the interest level in the two realms: 479 for "intersectionality in education" and 16,854 for "intersectionality in the workplace." It makes sense that the number of results returned was much higher in interest in the workplace as the education system works in reaction to the workplace.

In the workplace, study after study address how intersectionality can be applied to update different professional lenses. A study in geosciences sought to broaden the participation in the field, particularly among underrepresented groups such as women of color or others with multiple marginalized statuses. Geosciences is a field of study that relies heavily on team-based

projects, and employing a more diverse group that is aware of intersecting identities can translate to more diverse and developed teams of scholars (Núñez et al., 2020). A case study of 11 Latinx women in pursuit of undergraduate degrees addressed similar concerns of a lack of diversity's impact on engineering. Findings suggested that the field of engineering was "bitter cold" for these women of color due to their intersectionality in a white and male-dominated field and recommends that engineering departments increase their representation and "meaningful interaction" with underrepresented groups or risk continued stagnation (Banda, 2020). Grzanka (2020) presented intersectionality as a tool that should be used and addressed in the field of psychology. The author offered a case for the efficacy of understanding one's identities and those of others within and often at the center of their treatment of patients. In all these examples, intersectionality functions as the bridge for addressing gaps in interpersonal and intrapersonal skillsets.

If professions require human interactions, soft skills will be needed, and intersectionality grounds these abstract skills and displays their importance by refusing to oversimplify identities. The idea that humans are pattern-seeking creatures is not a novel or pioneering concept, by any means. However, in creating this system of education where each level leads to the next, we have *created* the pattern that we think we are simply seeing; our assumption early on about which skills to prioritize has created gaps that we now struggle to see through our initial "understanding." Intersectionality strips away those prior notions through its refusal to focus on singular-identifying markers in favor of the context of the whole. And now that a gap is evident, the assembly line of education breaks down unless we fill the created gaps at *each* of the levels. The workplace is already taking this approach towards both soft skills and intersectionality. HEIs are slightly behind this trend, but the research suggests they are following suit. High schools,

with their Common Core Standards specifically tied to concepts of college, work, and life "readiness," must continue this pattern if the gap in soft skills is to be eliminated, and intersectionality is the most efficient, functional, and equitable available curriculum to teach soft skills.

CHAPTER II

METHOD

In this study, I explored the necessity for the explicit teaching of soft skills at the high school level to enhance the employability and subsequent internal promotability of graduating high school students by analyzing the perceptions of elementary, middle, and high school teachers about the importance of a variety of hard and soft skills for future success alongside the perceptions of employers. The perceptions of individual teacher groups at different levels of the K-12 "education chain" allowed for an analysis of the possible gaps in current prescribed-curriculum skill alignment. The perceptions of employers allowed for an analysis of skill demand post-high school in comparison to the K-12 prescribed-curriculum. In essence, this study's purpose was to provide a clearer picture as to gaps in curriculum for students that affect their employability after graduation, and my study's findings have both practical and philosophical significance to K-12 educators attempting to address the following two questions:

- What is the perceived importance of soft skills towards post-high school success for K-12 teachers?
- 2. What is the perceived importance of soft skills towards post-high school success for employers?

Research Design

This study used a mixed method approach with both quantitative and qualitative techniques. Mixed method research emerged in the late 1980s (Creswell, 2014) and provides answers to research questions in both "narrative and numerical forms" (Teddlie & Tashakkori, 2009, p. 8). Because of its "methodological pluralism" granted by the bilateral approach of using both quantitative and qualitative measures, a mixed method design allowed me to explore,

analyze, and interpret data concerning a subject where insights are needed to determine future research projects (Johnson & Onwuegbuzie, 2004). Finding skill gaps and more specifically perceived *soft* skill gaps in the education chain necessitated casting a wide and varying net. A mixed method approach facilitated this casting in a way that a monomethod approach could not.

Although the study was mixed method, I primarily used a qualitative approach. The quantitative research component consisted of a survey given to teachers at three levels of K-12: elementary, middle, and high school. The survey asked teachers to rank-order a list of skills they believed necessary for students to have if they are to be successful post-high school. I used the rank order data to examine similarities and differences between the perceptions of the different levels of education. In addition to the rank-order item, the survey included short answer questions asking individual teachers to provide the reasons for their specific rankings of skills.

To address "student success" from the angle of employability and promotability, I conducted interviews with three local employers of different business types (a computer coding company, a shipping company, and a retail store) representing a variety of business types and sizes as well as conducting artifact analysis of their job postings during the interviews. The semi-structured interviews with employers solicited information about the skills needed to be considered a good candidate for entry level employment as well as the skills required for promotion for management-level positions within their companies. My analysis of the companies' job postings of entry level and management level positions was intended to provide insight into the companies' communicated skill demands at various levels of employment. I analyzed the job postings prior to conducting the interviews so that I could include a discussion of the alignment between job postings and hiring and promotion decisions in the interview protocols. The interviews and artifact analysis provided qualitative data invaluable for examining

the possible alignment gaps in K-12 education. In addition, the interviews point to potential future solutions that could be implemented in K-12 school systems.

Setting and Participants

This study was set in the Eugene, Oregon area. As of July 1, 2021, Eugene had an estimated population of approximately 175,000. The five largest ethnic groups were White 77%, 10% (Latinx), 5% Multiracial (Non-Latinx), 5% Asian, 1.3% Black, and 1.7% Native American, Pacific Islander, and Other (Non-Latinx).

Participants included teachers from local elementary, middle, and high schools as well as people responsible for hiring and promotion decisions at three Eugene-based businesses.

Educator Sample

"Teachers" in this study were defined as anyone who was delivering curriculum to students over a prolonged period (at least a school-length quarter). The participating school district has some generalizability to Oregon and other parts of the United States, but for this study, my goal was to provide a snapshot of perceptions within the Eugene area. Though the survey I conducted had just one participating school district, it was important to me to have a district in Eugene so that the connections between the K-12 school systems and potential local employers would have more internal validity. In a sense, I view my study as the start of a larger conversation in which others can study the generalizability of perceptual consonance/dissonance of teacher skill values in relation to the education chain.

To help increase the number of teachers willing to participate and reassure the participating district in the study that this study would not present an undue burden on their teachers, I designed the survey to be short and accessible. The survey included only five questions: one in which teachers indicated the level of education at which they teach

(elementary, middle, or high school), one in which teachers were asked to rank-order from a list of 11 skills, and three brief constructed-response follow-up questions. This structure was intended to increase the accessibility of the survey by keeping its design simple and the amount of time required to complete it short.

The survey was administered during April and May of 2023. Although the questions were the same for all teachers in the study, I analyzed the data separately for teachers from the three levels of education (elementary, middle, and high school) in hopes of understanding patterns of consonance or dissonance that might appear. In all, 56 classroom educators across the Elementary (n = 19), Middle (n = 14), and High school (n = 23) levels participated. The quantitative rankings of the participating educators were not weighted or adjusted based on experience or expertise level because my study was generally concerned with the perceptions of those delivering skill-based content in the classroom, not on how the perceptions might differ based on expertise or years of teaching experience.

Employer Sample

I used purposive sampling for choosing potential candidates for employer interviews. To be included in the employer sample, a business had to meet the minimum criteria of (a) having the possibility for internal upward mobility and (b) being outside the education sector. The possibility of internal upward mobility was essential to this study because the interview questioned the alignment of skillsets between entry level and management level positions within the business and evaluated the degree to which the skills identified by employers as essential for hiring and promotion matched the skills identified by K-12 teachers as essential for future success. Within the earlier described concepts of *future success* and *readiness*, employability at

the entry level does not guarantee progression and sustainability, factors which are essential for future success if "future" is viewed through the lens of sustained progression.

The decision to look for businesses outside the education sector was an attempt to cast as wide a net as possible within the Eugene area and thus enhance internal validity because of its focus on a single geographic area. As the voices of educators were quantified and qualified within the teacher survey, the employer sample provided areas of discussion that are not often thought of as directly linked to the K-12 education chain's impact on skill development.

To identify potential businesses, I contacted the Eugene Area Chamber of Commerce and searched zippia.com, a website dedicated to highlighting workplaces. From there, I contacted employers directly to gauge interest levels. In my contact letter, I described the interview process, highlighting the portion of the interview in which I would interrogate job descriptions to help them discover what that rhetoric might be communicating to their potential employees. My hope was that they would see the interview as a benefit to their organization's hiring and promotion process.

I excluded from my list of possible interview candidates businesses where entry level positions required a college degree because if entry level positions require a college degree, then K-12 is not feeding directly to them but instead feeding to them through HEIs. Although crucial in the overall discussion of education, the link in the chain between HEIs and businesses is outside the purview of this study.

In all, I contacted 25 organizations with offices in the Eugene, Oregon area through emails and calls with requests for semi-structured interviews that would center around hiring practices, specifically what skills were desired at the entry levels and management levels. Of the 25 organizations contacted, eight responded, but only three ultimately decided to complete the

interview process. However, the three organizations that did choose to participate reflected an interesting cross-section of the business community, and their responses raised interesting points related to the larger questions of curriculum that this study sought to ask and answer.

The first organization was a computer coding company with about 20 full-time employees, the majority of whom function in coding roles with a few lead and clerical positions. Our conversation centered around coding positions, as they were the entry level positions that had the possibility of promotability. The second organization was a shipping company with approximately 50 employees that included truck drivers, sales, management, and human resources departments. The third organization was a large department store with over 100 employees in over a dozen departments.

Instrumentation

I used two research instruments in this study: a survey and a semi-structured interview protocol.

Survey Instrument

The survey contained both quantitative and qualitative elements to gather data from K-12 teachers. The quantitative element of this study was derived from a ranking of skills. Participants were asked to rank eleven different skills based on their "importance to high school graduates' post-high school success." The skills represent a combination of some Common Core hard skills linked to classes required for graduation—*Algebra, Statistics and Probability, Reading, Writing, Scientific Research*, and the *Scientific Model*—and soft skills that have been identified by prior research as important for promotion within jobs across multiple fields as discussed in the Literature Synthesis—*Interpersonal Communication, Critical Thinking, Self-Evaluation, Leadership*, and *Resiliency*.

The qualitative element of the survey consisted of three follow-up questions after the ranking question. The first asked teachers to "Explain your reasoning for your top 3 choices." The second asked teachers' opinions on the degree to which the Common Core State Standards prepare students for "post-secondary success." The third and final question asked teachers to consider a hypothetical situation in which they have complete freedom to create curriculum: "What skills would you prioritize and why?" These three questions allowed teachers to expand upon their thinking. From the analysis side, having qualitative answers alongside quantitative data allowed for a more complete understanding of the story that the numbers may or may not tell.

Semi-Structured Interview Protocol

I conducted interviews with business professionals to understand better the thinking behind what skills are being demanded by employers in entry level and management-level positions. As discussed previously in the literature synthesis, employers in many sectors have recognized soft skill gaps in both candidates for positions and recently hired employees. Participants were presented with their own job posts for entry level and managerial positions, and they were asked to look at the list of skills for each position. The first goal was to interrogate the "message" that the job postings communicate to prospective employees and the education field in terms of what is needed to be hired and whether that message aligns with the skillset employers want from their new hires. The second goal was to ask employers what skills they thought were most helpful towards employability and promotability. To go into this type of depth, I used a semi-structured interview approach, using open-ended questions that allow for the exploration of ideas as they arise (Longhurst, 2003).

Data Analysis

I analyzed data from the teacher surveys separately from the employer interviews and artifact analysis data.

Quantitative Data: Quantitative Analysis

The quantitative section of this study investigated the perceptions of teachers at the elementary, middle, and high school levels. These teachers were asked to rank eleven skills in the order of their "importance to post-high school success." Rankings were quantified by assigning a number value to each position, with the most highly ranked skill given a score of 1, the second most highly ranked skill given a score of 2, and so on. These scores were then averaged in their respective sample groups—elementary, middle, and high school. The means, standard deviations, and variance from these three teacher groups were then analyzed for patterns of similarity and difference across all three levels.

Qualitative Data: Thematic Analysis

I used thematic analysis (see Table 1) for the interviews and short answer sections of the survey to identify, analyze, and report patterns within the data (Braun & Clarke, 2006). I chose thematic analysis over other forms of qualitative pattern analysis such as discourse analysis, thematic decomposition analysis, and grounded theory based on thematic analysis' versatility as an analytical structure. Through a thematic analysis framework, the researcher can choose either an inductive 'bottom up' approach or a theoretical, deductive, 'top down' approach (Braun & Clarke, 2006). Because I was interested in the theoretical findings surrounding specific research questions (i.e., *What are the perceptions of a plurality of stakeholders of the importance of soft skills for success?*), it followed that themes should be derived and coded based on how the transcript data illuminates the subject matter of the research questions. Therefore, an inductive

approach, in which the specific observations lead to patterns that can then lead to general

conclusions/discussions, seemed the most appropriate and objective for this study.

Phase	Description of the process		
1. Familiarizing yourself with the data	Transcribing data from interviews, reading interviews and short answers from surveys, noting initial ideas		
2. Generating initial codes	Coding features across the data for frequency and relevancy		
3. Searching for themes	Combining codes by potential thematic area, gathering relevant data for each potential theme		
4. Reviewing themes	Refining potential themes (removal if not enough data to support or data is too diverse), collapsing other potential themes into each other (if, for example, two themes that appear to be separate actually form one theme), breaking down themes that need to be their own separate themes. Creating a thematic map that represents connections between themes and sub-themes		
5. Defining and naming themes	For each finalized theme, creating a definition and identifying the theme's 'story,' considering how each theme fits into the broader overall 'story,' especially in relation to the research questions		
6. Producing the report	Final analysis and write-up tells the story of the data, within and across themes		

 Table 1. Thematic Analysis Framework

Process adapted from "Using Thematic Analysis in Psychology," by Braun & Clarke, 2006. *Qualitative Research in Psychology*. Pgs. 16-23

Threats to Validity

The research questions posed in this study were exploratory in nature and thus carried

with them the implication that existing research, especially quantitative research, was not as

extensive as it pertains to this topic as in other areas of education. The abstract and often multi-

defined terms that this study considered, which included but were not limited to "success," "readiness," and "soft skills," are not agreed upon within the education community. Though one of the goals of this study was to discover just how large that disparity of agreement might be surrounding these terms, quantifying perception and correlating perception agreement, or lack thereof, with possible gaps in the curriculum's ability to prepare high school students for post-high school success is a profound task that this study could not hope to encompass. To prove a systemic correlation gap between a hard skill focused K-12 public education curriculum and the soft skills that might be needed for success, a larger sample of teachers and a more robust design would be needed. In that sense, this study was but an important introductory paragraph to a much larger story.

CHAPTER III

RESULTS

Interviews

Once again, part of the purpose for these interviews was to understand better what skills are in demand "at the end of the education chain" in an effort to relay those communicated needs to K-12 institutions as they strategize what curriculums they will support and instill in the coming years. Analysis of the interview data from three organizations led to the generation of five themes regarding the skills organizations are looking for in potential employees at both the entry level and towards their longevity and promotability within the organizations. These themes were derived using Braun and Clarke's process of identifying patterns through rigorous data familiarization, data coding, theme development, and theme revision (2006).

For the first interview from the coding organization, a summary of points post-interview was needed because of technical difficulties in the audio recording. Interviews two and three were recorded and transcribed, verbatim, by the researcher. I present the results of these interviews in a synthesized format that puts the three interviews in conversation with one another, but specifics about organizations, such as but not limited to, the interviewees' names, business or product names, etc. are not included to protect the information of the interviewees and their respective organizations. The following themes emerged from the interviews: ability/willingness to learn, character/work ethic, teamwork/communication, and leadership/communication.

Ability/Willingness to Learn

All three organizations spoke about an ability and willingness to learn as an important skill for performing almost any job in their organizations. When speaking about the necessity of

a Commercial Driver License (CDL) for a truck driving position that requires one, the interviewee said that even though it is sometimes listed as a requirement on their hiring documents, they have "had success with training people who have no CDL versus people who come in with CDLs and have...a mix of skills that doesn't match." This response implies that the organization at least sometimes prioritizes the soft skill of the ability to learn over the hard skill compliance of holding a CDL.

The coding organization purposefully avoids listing specific qualifications for formal coding experience because they find that "informal coding experience," defined as "coding experience that doesn't show up in a college degree" requires the "critical thinking" and "independent learning" components which they value. They argued that it was often more difficult to know, based on a person's college degree, what the level of coding experience and expertise was in a prospective hire. In contrast, the degree made it more difficult to gauge the prospective employee's hard skill abilities and hard skill growth capabilities. This interviewee argued that because a person who was doing coding outside of a college would often need to learn coding language on their own and create projects instead of having them assigned to them, those individuals tended to be better at independent work because of their ability to learn independently.

The department store organization went a step further into the realm of learning as a necessary and promotable skill by fashioning its entire system of promotion, from entry level positions to direct supervisors to upper-level management, on an integrated program of learning. For example, all employees in the organization must apply for and go through a six-week "Supervisor in Training" program before applying for any supervisory position, regardless of their educational qualifications pre- or post-high school. This organization offers a wide range of

positions, and they value employees who seek to learn those different positions. They encourage this learning by posting signups during busy seasons for employees to "cross train." When supervisory positions are posted, employees who have sought out and succeeded in cross training positions are preferred, especially for supervisory roles. The interviewee made a point to show me in the employee handbook the many ways and instances in which it states, "this company believes in building from the ground up for its lead positions." To this same point, despite the size of this organization that has hundreds of employees, only a very small percentage of supervisory positions are posted outside of the company, and these are only because they require specializations by law. All other positions require the Supervisor in Training program completion, at a minimum, as a demonstration of learning.

All three organizations were interested primarily in promoting from within and saw most of their long-term productivity and retention successes from employees who started at the entry level and learned on the job. However, when asked what they looked for when measuring whether potential hires were capable and willing learners, none of the three organizations spoke to a specific methodology that they followed. Instead, all three addressed identifying capable and willing learners as a challenge in the hiring process. The computer programming organization probably came closest to feeling confident about identifying capable learners. The interviewee talked about coding as "its own language" and "a language that means you always have to learn new things if you want to progress." In this sense, this interviewee felt relatively confident that if they could talk about coding and/or see the person's coding, the interviewee could gauge, to some degree, their ability to learn coding. However, the interviewee was quick to point out that an applicant's ability to learn coding on their own was only one portion of the type of learning that their jobs require. Learning from each other and being able to adapt in a team setting were also integral "learning-related" soft skills, but the interviewee thought they were much more difficult to measure in an interview process.

Character/Work Ethic

All three organizations felt it was important during the interview to talk about the culture they were trying to instill and the organization's values. They talked about morals, kindness, and resilience. Often, conversations about what skills potential hires should have when hired became conversations about what kind of person they would like to work with. The coding organization talked about the concept of hiring people whom others would like to work next to and with, using rhetorical questions like "Why would you want to hire someone no one likes?" The things that they described people not liking were similar to the shipping organization's stated values of "transparency, honesty, integrity, kindness, and authenticity." The department store organization stated that their employees "follow the law" and "have good work ethic" and then described examples of honesty, integrity, and kindness.

When asked to define what "good character" entails, the most common example cited from all three organizations was a connection in some way to the concept of a positive work ethic. Many of the questions they would ask potential hires, especially the ones in which they gave scenarios, concerned what potential hires would do in situations where they would not be readily accountable for their actions. One interviewee would pose a scenario in which all the tasks of a project had been divvied up, but they knew there were one or two things unaccounted for: "What would you do in that situation?" The goal of these questions, as the strategy was explained to me in the interview, was to see reactions and get responses in real time. They felt that asking the question in real time created more of a possibility for a genuine answer that would reveal some character details for that individual. Based on the way the three organizations

were talking about "character" and "work ethic," in definitions that readily overlapped and conjoined, I am using both as relatively synonymous terms.

None of the organizations framed character necessarily as a skill that can be developed. Towards the end of one of the interviews, the interviewee said they "hire for character and train for skill," a quote attributed to Peter Schutz, former president and CEO of Porsche, motivational speaker, and businessperson. This quote is quite popular in business circles in differentiating between the resume and interview as evaluation tools for potential hires. This interviewee said that "interviews are generally behavioral based because that has historically defined who's successful here." These two quotes imply that their organization views character as a behavioral attribute, that character is not necessarily a skill in the eyes of their organization and is therefore not trainable. The organization very much values the importance of character/work ethic.

All three organizations said that they used the interview specifically to assess things like character and work ethic because resumes and questionnaires did not tend to measure those things well. One interviewee said that they use interviews to "read people." The other two interviewees talked about how they have dozens of prepared scenarios that can be adjusted during the interview to get more information on a person's work ethic and character. For work ethic, these two organizations like to conduct job shadows to show the level of work that is expected: "Sometimes, you can tell right away by their faces whether this is the right job for them or not."

The department store organization that heavily prioritized learning seemed to define work ethic by one's desire and effort to learn. They conduct evaluations on new employees in which they evaluate job performance primarily to understand what an employee needs to be successful. Much of the information that supervisors include in these evaluations is related to how much that

new employee has been "volunteering for opportunities to learn different things." Furthermore, the interviewee told me that "general managers in this company all have started off at entry level positions." Based off of this promotion structure, work ethic/character matters even more than a hard skill qualification such as an advanced degree since everyone must start at an entry level position regardless of prior qualifications. In their eyes, this creates a work culture that attracts individuals with good character and strong work ethic.

Similarly, another interviewee said that during their interview process, they would do a half-day job shadow where potential drivers could watch and ask questions, and their organization really paid attention to whether potential drivers ask questions: "if you don't ask questions, we're going to think you don't care, or you're not interesting, or you're not interested in it." Though I attribute this comment to the "Ability/willingness to learn" theme as well, I mention it here because of its parallels to the previously mentioned strategy of reading people in the moment. They are looking for ways in which a potential driver can demonstrate good work ethic in real time and without prompting, in this case defined as something akin to "taking an active interest in the work."

Speaking of "without prompting," all three organizations, when describing the concept of a strong work ethic, emphasized the need to be able to go above and beyond the base level of effort to do helpful things unprompted. The department store organization valued this skill and described an employee type that does not wait for someone to give them tasks in order to be busy but instead seeks out productive and helpful work throughout their workday as "eager beavers." The interviewee described this employee type as the one who enrolls in the Supervisor in Training programs, signs up immediately for cross training opportunities, and is visibly hustling through their day, even when they do not think anyone is looking. In this sense, "good character"

might be defined by a self-drive and personal pride in one's work, further connecting "character" to "work ethic" in the organization's eyes. This interviewee went so far as to say that their organization's culture is designed in such a way as to benefit those who are "eager beavers."

Similar to this tangential yet important connection, another organization listed two of their most desired skills as "attention to detail" and "commitment to data," which the interviewee said back-to-back and immediately asked the question out loud: "Aren't those the same thing?" At first glance, both seem most in line with hard skills. After all, when we think of data, we usually think of subjects such as math or science first, subjects primarily associated with hard skills. However, the interviewee's descriptions of what was meant by "attention to detail" and "commitment to data" included connecting the terms back to their values of "transparency, honesty, integrity, and authenticity." Paying attention to something and committing to doing something, especially when both of those actions are not under direct supervision seemed to be connected to notions of character because the details and data being attended to was not as important as the attention itself. This approach seems to return to the notion of hiring for character and training for skill. Once again, the interviewee's framing of these amalgamations of character and work ethic as something other than skills provides valuable insight into hiring managers' perspectives on what does and does not constitute a skill.

Teamwork/Communication

All three organizations expressed the need for potential hires to be able to work with others, and all professed the challenges when trying to evaluate "teamwork" in a resume, interview, or other classic mode of evaluation during the hiring process. There were crossover concepts between teamwork and character, quotes that addressed both at once. The coding organization's internal question/rubric— "Would I want to work with this person?"—is the

contrapositive of "Why would you want to hire someone no one likes?" that was mentioned in the 'Character/Work Ethic' section. The link between behavior and teamwork was a common theme with all three organizations. The shipping organization connected the two directly, wanting to hire employees who are "modeling behaviors that match with both our culture and how they're getting along with others." Teamwork, in this mode, seems like an absence of "bad teamwork" more than a skill, and to their point and their "bottom line," the logic follows that most organizations, especially if they do quite a bit of hiring, are first and foremost concerned with dismissing candidates who would be adversarial to the organization's culture and thus subtractive to the organization's teamwork. This approach speaks to the challenges hiring managers often face and how they are deciding to frame those challenges: by differentiating behavior from skill.

The one skill-related concept that was mentioned over and over in all three interviews in terms of teamwork was *communication*. The coding organization wanted to hire someone who can get along with others and communicate, especially during ongoing projects. The interviewee described a project model where about a dozen coders are working on three or four projects that are in various stages of completion, with different coders doing different jobs for different projects and those having different roles in respective teams. Communication must be clear, honest, and prompt and across multiple platforms of communication: Slack, email, face-to-face, etc.

The department store organization stated that employees were "successful due to [their] ability to communicate" before talking about how busy a day at the organization can be. Communication was vital because of the high degree of coordination that was necessary for daily tasks in the building. There were some ongoing activities, but teamwork functioned much

differently at their organization than at the coding organization, and thus the style of communication that was needed was also different. More face-to-face interactions were necessary with both other employees, supervisors, and customers. Communication not only needed to be clear and concise, but often depended on patience, tone, and body language. The interviewee mentioned that he was by nature a little more introverted. When he started as an employee, there was an adjustment period in which he had to learn a more boisterous style of communication that was not always his natural one. Combined with the concept of a strong work ethic, communication is integral in this organization's system, as so many of the pathways to promotion are based on an employee's communicative initiative. Employees must communicate by signing up for cross-training opportunities, participating in the classroom-style environments of the Supervisor in Training program, etc. The interviewee talked about these employee-toemployee interactions, as well as customer interactions, as pivotal pieces towards employee success, defined as sustainment and progression in the job. At first glance, returning to that notion of whether that privileges a more gregarious individual, this might seem to give an advantage to the employee who is more comfortable talking and interacting. However, the interviewee made a point to say that anyone can be successful in their organization if they are strong learners and hard workers. This might imply that the interviewee viewed communication as a learnable skill, and that different styles of communication were accepted instead of creating a model where everyone is asked to communicate in the same way. The acceptance of the variety of communicative styles and needs makes sense within the framework of such a large organization with so many employees and different departments. Because cross-training is so encouraged, it is important for teams to function in a variety of contexts while still following the organization's desired system of structure.

The shipping organization requires something very different when it comes to teamwork and communication. Drivers are out for delivery for the majority of their days, and thus the team is physically separated. More independence is needed. Communication must be efficient and succinct. The interviewee said that they value employees who demonstrate, during interviews and job shadows, an ability to "work through conflict." This might mean making decisions out in the field based on their own judgements of what the organization would want them to do with/for customers. In these situations, communication has relatively high stakes, with the drivers often being a surrogate for the organization. Towards the teamwork aspect, drivers must be the connecting tissue between the organization's home base and the customer. Not losing the understanding of how the different pieces of this team fit together while allowing for some independent decision-making is essential.

Leadership/Communication

Similar to the teamwork/communication theme, all three organizations spoke to the importance of leadership, but all three organizations wanted/needed very different things from their leaders. The department store organization, along the lines of its culture based around learning, said that "90% of your job should be teaching for the next position." In this sense, leading is less about telling people what to do than helping to build employees' skills. Often, this type of organization might be characterized as motivated by profit, and thus "success" could be connected to profit or productivity. If the values of an organization are geared around learning and teaching, and those who are successful at learning and teaching are rewarded within this system with promotions and a stable career, then the employees will be motivated to improve their performance naturally, learning to build skills and help others to improve their performance and sharing knowledge and experience through teaching others for their next position. This

encourages learning and teaching as the primary goals, and profit and productivity become the inevitable byproducts of the primary improvements created by the learning-rich environment. If effective, this practice of making the learning primary and the productivity secondary speaks to many of the concerns in the literature synthesis of this paper surrounding the simple but important issue of when you make something primary you make something else secondary.

The shipping organization took a similar approach to leadership: "this company believes in building from the ground up for those lead positions." Most of their lead driver positions or driver supervisors were drivers previously. However, in other departments, the interviewee expressed frustration with internal promotions. They had recently promoted their best salesperson to a management role, and neither the person nor the organization was happy. The interviewee thought that this might be a sign that the skillsets were too different. What the interviewee thought makes someone good at sales—independent and sometimes selfish thinking since they work partially on commission—does not necessarily make them good managers, in which they need to be strong communicators and understand how to navigate "different hierarchies of people." Leadership was an important quality to this organization in the interviewee's opinion, but they expressed some frustration in trying to evaluate leadership and leadership-based communication skills, especially for those who were applying for management positions.

The coding organization differed quite a bit in their approach because of the type of person whom they felt was drawn to coding as a career. The interviewee described the personality of a coder as someone who likes to code more than necessarily "climb the ladder." However, the interviewee explained that just because a coder did not want a lead or management position did not mean that the individual was less driven or did not go after a promotion for a

negative reason. Because coding as a job already presents different challenges frequently, a productive coder could often make as much money as a manager and never have a formal leadership position. In their structure, the interviewee described a relatively flat hierarchy with a few "senior coders" who might lead projects more often than others, but the discrepancy in pay was minimal. The interviewee admitted that "coders don't really like to be managed." That is not to say that coders are more difficult to lead or communicate with than any other profession, but the job and the personality type tends to, in the interviewee's opinion, want to address and solve problems involving computer code over managing others or being managed by others.

For all three organizations, communication arose as the most valuable skill that a leader could possess. Hence, I have decided to code communication alongside leadership for this thematic analysis, as it seems all three organizations view the terms as synonymous, at least in name. When asked what the most important skill was that they looked for in future leaders, the department store organization interviewee said that "the biggest thing for good manager skills is people skills, communication." Leadership as a concept deserves quite a bit of examination as a skill, perhaps even a determination of whether it is a skill or an amalgam of other skills. Even so, the interviewees' similarities in connecting leadership to communication at the very least speak to the importance of communication within leadership.

Survey

Quantitative Rank Order Analysis

I used rank order analysis to determine mean for four different groupings of the educator sample population: 'Overall' which includes all participating educators' rankings, 'Elementary,' 'Middle,' and 'High.' The mean corresponds with where the participants ranked the eleven skills

with '1' being the 'most important' and '11' being the 'least important' skills needed for success post-high school.

I also calculated standard deviation and variance for each of the four groupings. Based on the small sample size (n = 56), generalizability of these findings is quite limited. As I will discuss further in the Discussion chapter, these data should be thought of as preliminary in terms of guidance for making judgments on what skills must be taught explicitly. I calculated standard deviation and variance to analyze where the sample population might or might not be aligned *with each other* in their thinking around the value of skills post-high school.

As a reminder, there were eleven skills listed in the survey, five of which would be considered 'soft skills' under the various definitions discussed in this paper's literature synthesis, and six of which would be considered 'hard skills.' Among and across sample groups, some interesting patterns emerged (see Table 2).

Overall (Mean)	Elementary (Mean)	Middle (Mean)	High (Mean)
Interpersonal Communication (2.77)	Interpersonal Communication (2.67)	Interpersonal Communication (2.33)	Reading (2.95)
Reading (3.19)	Critical Thinking (2.93)	Resiliency (2.5)	Interpersonal Communication (3.10)
Critical Thinking (3.21)	Reading (3.60)	Reading (3.08)	(3.10) Critical Thinking (3.19)
Resiliency (3.75)	Resiliency (3.93)	Critical Thinking (3.58)	Resiliency (4.33)

Table 2. Top Four Ranked Skills and their Means

Note. 'Hard Skills' listed in **bold**. 'Soft Skills' listed in *italics*.

Table 2 illustrates the most apparent pattern: across all sample groups, three of the top four ranked skills were soft skills: interpersonal communication, critical thinking, and resiliency. Although none of these three skills are explicit standards in the Common Core State Standards, participating educators agreed collectively that interpersonal communication was the most important skill needed for student success post-high school. The only sample group that did not rank interpersonal communication highest, the high school group, had the same top three as the other groups and the most distinct top three as illustrated by the gap between the third highest and fourth highest ranked skills.

Reading was the one hard skill in the top four of every sample group. Once again, elementary and middle sample groups seemed to be more closely aligned in their characterizations of what was important, though the three did not differ greatly from each other throughout these data. The high school sample group listed reading as the most important skill for post-high school success, while the elementary and middle sample groups thought it was third-most important.

The middle three ranked skills continued some trends and revealed a few more (see Table 3). Once again, the elementary and middle school sample groups were more closely aligned than the high school sample group, but all three shared the same three skills and similar means. The difference between the fourth and the fifth ranked skills was much closer for the elementary and high school sample groups, 0.14 and 0.19, respectively, whereas the middle school sample group difference in means was 1.25.

Overall	Elementary	Middle	High
Self-Evaluation	Self-Evaluation	Self-Evaluation	Writing
(4.75)	(4.07)	(4.83)	(4.52)
Writing	Writing	Writing	Self-Evaluation
(4.94)	(4.93)	(5.67)	(5.19)
Leadership	Leadership	Leadership	Leadership
(7.1)	(7.33)	(6.92)	(7.05)

Table 3. Middle Three Ranked Skills and their Means

Note. 'Hard Skills' listed in **bold**. 'Soft Skills' listed in *italics*.

The bottom four ranked skills (see Table 4) were all hard skills, skills often associated with Science, Technology, Engineering, and Math (STEM) fields. This section also continued the trend of tiers with a larger gap between seven and eight than all the other differences in means except for the gap between skills six and seven across all sample groups. There was no consensus on the order for skills eight, nine, and ten across sample groups, but all three sample groups chose statistics and probabilities, the scientific method, and Algebra in some order. Scientific Research was the only skill whose mean was over ten for two sample groups and approaching ten, 9.67, for the elementary sample group.

Overall	Elementary	Middle	High
Statistics & Probabilities (8.63)	Statistics & Probabilities (8.47)	Scientific Method (8.17)	Statistics & Probabilities (8.29)
Scientific Method (8.77)	Scientific Method (9.20)	Statistics & Probabilities (9.42)	Algebra (8.57)
Algebra	Algebra	Algebra	Scientific Method
(8.98)	(9.20)	(9.42)	(8.81)
Scientific	Scientific	Scientific	Scientific
Research	Research	Research	Research
(9.92)	(9.67)	(10.08)	(10.00)

Table 4. Bottom Four Ranked Skills and their Means

Note. 'Hard Skills' listed in **bold**. 'Soft Skills' listed in *italics*.

Survey Qualitative Thematic Analysis

Similar to the approach taken with the organization interviews, I used thematic analysis

to synthesize the conversations around the short answer questions from the educator survey.

Each question will be discussed below through identified and defined themes.

Question 4: Why are your top three skills the most important to a high school

graduate's post-high school success?

As was discussed in the rank order analysis section for this survey, a clear top four emerged across all three sample groups: interpersonal communication, reading, critical thinking, and resiliency. In the following thematic analyses, these skills were mentioned many times, far more than the other seven skills. I highlighted the problem with defining soft skills in the literature synthesis in that the terminology surrounding soft skills is often abstract and overarching. The themes that I found from the educator responses resemble this challenge of differentiation in that many of the answers overlap to one or more themes. In response to this issue, I attempted to code the answers under the most relevant thematic category for the specific comment being made instead of putting the comment under both themes, even if there was relevance in both thematic categories. The following four themes will be presented for question four in turn: lifelong/versatile learning skills, knowledge of/evaluation of self, decisionmaking/problem solving, and communication.

Lifelong/Versatile Learning Skills

If we are going to say that soft skills are necessary because of their wide reach, then it follows that soft skills will be difficult to "pin down" to singular subjects. From the educators' answers to question four, I could see evidence of this difficulty. I chose to call this first theme *lifelong/versatile learning skills* in response to the multitude of educator answers that included explanations of the values of skills as things that can be useful in a variety of careers, goals, aspirations, and challenges throughout life. This theme is about, as one elementary educator suggested, "life skills that will carry into all adulthood, no matter what a person does." Multiple educators made this connection between the soft skills that are advantageous to future learning, especially the implied learning of job-related skills post-high school. A middle school educator thought that "with the ability to communicate clearly and read and think critically, students could

learn any new information or skill they chose to." A high school educator agreed with this approach of instilling lifelong learning skills as they argued "many skills can continue to be learned/taught after high school. Grit, a growth mindset, and resilience are the foundation of EVERYTHING on the list [of eleven skills]." In the short answer sections, resilience was brought up, either directly or through terms like 'grit' more often than anything except communication.

Towards the concept of versatility, a high school educator thought that "interpersonal communication, critical thinking, and self-efficacy...are all required to successfully use the other eight in either the workforce or higher education." Resiliency was a skill that many educators found to be versatile in helping to "cope with stress and trauma...essential to survival and the opportunity to learn or be successful when not everything is perfect." In the absence of certain skills, a middle school educator thought that being "buoyed by resilience (and accompanying skills), there may be a better chance of persisting and not giving up hope." Describing resiliency, an elementary educator stated that "being able to 'change gears' successfully as each transition happens seems…more valuable as compared to the curriculum skills."

Critical thinking and communication showed up frequently in educators' short answers for both their "lifelong" qualities and their versatility, with communication showing up so much that it deserved its own thematic category, and critical thinking being used in a few different ways, appearing again frequently in the decision making/problem solving theme analysis. Critical thinking was described by one elementary educator as a skill that serves people well, "no matter what path forward they choose" adding that, "knowing how to make good choices for yourself will allow for a longer healthier life." Along with reading, a different elementary

educator proposed, critical thinking helps to "interpret all forms of information in our information-heavy age."

Knowledge of/Evaluation of Self

This theme corresponds with the many educator responses of concern for the well-being of their students post-high school. Educator responses intimated that there are not enough supports or skill-related activities that teach students how to understand themselves and how to use that understanding to evaluate and improve. Resiliency and self-evaluation showed up heavily in this theme.

Resiliency is often referred to by educators in these short answers as "bouncing back" or "grit" but also as being able to "accept failure, learn from it, and move on with a new outlook." To that point, overcoming failure is a skill that needs to be taught more explicitly, but sometimes the acceptance portion of resiliency requires just as much attention if we want to build the skill of resiliency. A high school educator stated as much straightforwardly: "students need to learn how to work through tough situations and to not give up." If students need an example as to why, another high school educator provides the evidence by stating "you can't progress in a job if you aren't resilient enough to stay."

Self-evaluation as a skill in the way these educators described it, might be linked to concepts of character. Similar to the interviewee who quoted Peter Schutz's "hire for character and train for skill," educators seemed to be interested in how to build character and were looking at self-evaluation as a possible means. A high school educator explained their philosophy around hiring as "opportunities are offered to people who are likable and dependable. You can learn what to do at any stage, it's much harder to later change who you are." Many educators spoke about students' need to "identify and evaluate their own characteristics and abilities in order to

move forward and determine future needs" or "know more about themselves to move on to the next stage of their lives." This methodology, which seems a lot like "try, evaluate, improve" very much fits the mindset of a teacher and it follows that so many educators might think about the building of character as a process of self-evaluation. Another value that was attributed to self-evaluation was the effect that an improvement of one's character has on society. An elementary educator said that self-evaluation, "helps one become a better acting member of society," and a high school educator agreed, imploring us to "reflect on ourselves in order to evaluate what we can contribute to society."

Decision-Making/Problem Solving

The theme of decision-making/problem solving is inevitably tied to critical thinking. Viewing success in the world through this prism means looking at the world as a series of problems that one must face and decisions one must make. This is like using self-evaluation and resiliency as a means of improving one's character or career prospects. As one educator noted, critical thinking is "key and can be applied to all careers and higher education" in that thinking critically is "necessary for decision making, interpreting information." When thinking about students' futures, an elementary school educator stated that "if workers are unable to objectively analyze issues and form a judgment then their judgments about said issues become convoluted."

Many educators expressed different ways in which critical thinking works with other skills. A middle school educator said that critical thinking and resiliency, "work together when a person is working toward independence...When problems arise, the ability to think through the problem and not quit work in tandem." An elementary school educator connected self-evaluation and decision-making: "to accurately be able to identify and evaluate their own characteristics and abilities, in order to move forward and determine future needs [is] critical to personal decision

making," whereas a middle school educator connected reading to critical thinking: "reading and gaining knowledge is important, but the ability to evaluate that information is just as important when making decisions." Alongside communication, critical thinking might have the most overarching definitions and applications post-high school.

Communication

The final theme relates to the highest ranked post-high school skill overall and for the elementary and middle school sample groups. Given the priority educators in the sample assigned to this skill, it follows that in the short answer section, communication would be mentioned more than any other skill. A point that was brought up in a few different ways was how communication affects a person's ability to "show up in conversation and collaboration with colleagues and peers" and how doing so "opens up so many doors and helps when work/school has its inevitable tough moments." Like some of the takeaways from the interviews, a middle school educator articulated that "understanding how to listen and how to express ourselves respectfully is essential for work, college, and life in general." Many of the educators' answers reflected their expertise in thinking about communication's effects on learning, such as positing that "speaking fluency is shown to have a direct correlation with job aptitude perception, as well as with national income rates" or that "interpersonal communication is involved in almost every job, and certainly involved in getting nearly every job," as one high school educator stated.

Speaking about the nuance that strong communication skills can affect, an elementary educator said: "learning to professionally communicate disagreement in a way that still allows space for the other person is...highly valued whether it is directly out of high school or heading into the collegiate world."

Question 5: Do the Common Core Standards for your grade level prepare your students for post-high school success? Question 6: Why?

Many respondents answered "Yes" for question five, but their accompanying short answer explanations of why were not definitively "Yes." Instead, they often explained both the good and bad elements of the Common Core State Standards (CCSS). Thus, I focus my analysis on the explanations rather than the dichotomous yes/no response.

After reading through the short answer responses to question 6, which explain the reasoning behind their answers to question 5, it was clear that educators might think very differently about the efficacy of the Common Core State Standards (CCSS), but none of the educators surveyed mentioned having common standards in and of itself as a problem. In this sense, I was more interested in what they would like the CCSS to do, what skills they would like taught, and what kind of wording is/might be necessary for them to be taught consistently and effectively. Because of that, I decided that reading their responses to question seven in terms of what they think works, what they think does not work and how they think the CCSS can be improved seemed most relevant to the analysis of this question based on the qualitative responses I received.

What Works in CCSS?

This category contains quite a few caveats. CCSS was viewed by many educators as a necessary foundation, that "addresses academic goals" and "potentially prepare[s] students for after graduation." They present a "road map for educators to teach and reach certain standards that do help to prepare students for post-high school success." One middle school educator connected their English Language Arts standards of "reading, writing, speaking, and listening" to soft skills in that they thought it was "through these four strands that critical thinking is

developed." The reason I say that this section is presented with caveats has to do with the rhetoric of many of the educator's quotes. "Yes, to a degree," "potentially," or "should" were common words used to describe the effectiveness of CCSS. Many of the educators who thought CCSS "works" seemed to be saying that they understood how it *could work*.

What Does Not Work in CCSS?

The "What Does Not Work in CCSS?" category pointed out what educators saw as flaws in the wording of CCSS. They saw a lack of "practicality of having such a long list of standards...without guidance for prioritization." Many educators, perhaps because of previous questions priming their responses or perhaps because they have had frustrations with CCSS in the past and have been thinking about what is missing in them, talked of how there are "too many standards that do not address real world needs" or "skills that include stamina, work ethic, working as a contributor and character qualities that employers look for in a candidate." Some inferred why some of the things they wished were in CCSS are not in it by saying "you can't quantify and test these soft skills so legislators hate them, but society needs them desperately."

Some educators took a different stance towards why they thought CCSS was not working, by saying that they thought the expectations had been "toned down," that they "do not hold them to standards that are upward moving." These comments give voice to a population of educators who think education is being adversely affected primarily by a lack of rigor. However, this thought did not seem to be the consensus of educators from this survey's sample. The consensus, if there was one, of what is not working with CCSS, seemed to be a combination of "vague language that makes it so two different teachers could interpret the same standard in totally different ways," "they mainly focus on facts and figures, not on problem solving or critical thinking," and "it tends to be very content-based rather than skill-based."

What Can Be Improved?

One elementary educator made the point that "what people need most is not taught in school." Out of context, this could mean almost anything, but as a thought exercise could be useful. One elementary educator suggested that "additional standards focused on personal skills, such as resiliency, self-evaluation, and interpersonal communication would be an invaluable addition." Alongside a high school educator's comment that "creative and critical thinking aren't mandated by CCSS; both of these are essential to engagement and success as an adult," the previous comment hints at the need for additions to CCSS, a sentiment raised often in the short answers to this question that must be addressed in this paper's Discussion section.

Question 7 and 8: If you had complete freedom to create curriculum for your students, what skills would you prioritize to prepare them for post-high school success? Why would you choose to prioritize these skills?

This question brought up a hypothetical about which so many teachers think during their teaching career: what would I do if I could do anything for my kids? The answers they provided speak to the care educators have and desire for their students. The vast majority of their suggestions had to do with teaching and encouraging empathy in their students through soft skills instruction with empathy as the center for learning about the self and the world around them.

Empathy through Soft Skills

An elementary educator wanted to create "situations and projects that include problem solving, multiple layers of writing." They felt that "students need more opportunities to create" because "in the real world, students need to be ready to face challenges…with confidence." Another elementary educator said that "empathy is an essential driving force" which a middle educator echoed, saying "Empathy, interpersonal communication, critical thinking, and

resiliency...will help them to advance." A high school educator responded that "learning to empathize and communicate is key" because "we have to work with others in the real world." A similar refrain came from a middle school educator who thought that "with an empathetic, critical thinker they could solve problems that best help those around them."

CHAPTER IV

DISCUSSION

Limitations

All studies have limitations, and this dissertation is no exception. Some of the key limitations of this study include: sample size, sample variety, and specificity of educator groupings. Larger sample sizes for both the amount of organizations interviewed and the amount of educators surveyed would have increased the generalizability of this study and allowed for more statistical analysis. A sample variety of organizations that included a few different types of businesses would also have increased the study's generalizability. Tracking what subjects participating educators taught would have been helpful in controlling any possible bias and possibly seeing some different patterns. For example, a survey that not only asks what "level" of K-12 an educator teaches but also what subject could reveal whether educators are ranking skills that align with the subjects they teach.

Despite these limitations, however, this study does provide some important contributions to the knowledge base around educators' and employers' views of the importance of soft skills. I discuss these next.

Key Takeaways from This Study

For this discussion section, I would like to address some of the different elements individually before speaking about how the education chain is communicating, the micro before the macro.

Findings Related to the Interviews, Specifically

During the Interview Results section, a few things were mentioned that I would like to address here. A disconnect that I observed in the communication between high school and posthigh school organizations has to do with the framing of what constitutes a skill. The data suggests that organizations value the importance of character and work ethic. Robles (2012) examined business executives' perceptions of which soft skills they wanted new employees to have when hired, and this study encountered similar patterns in terms of framing. Based off the responses from 49 executives, over 500 soft skills were listed and coded with the ten most mentioned soft skill attributes: communication, courtesy, flexibility, integrity, interpersonal skills, positive attitude, professionalism, responsibility, teamwork, and work ethic. Here, "work ethic" is listed literally and I would argue "character" appears in multiple categories according to the descriptions of the term from the three interviews. The disconnect, once again, has to do with how soft skills are framed. Here, executives seem to be thinking about soft skills in general in a similar way to the way interviewees from this study thought about some of the more abstract/versatile soft skills such as character and work ethic: that these were 'skills' but not necessarily in the same way as hard skills.

Robles (2012) explains softs skills as "the intangible, nontechnical, personality-specific skills that determine one's strengths as a leader, facilitator, mediator, and negotiator" (p. 455). Similar to the difficulty that the interviewees of the three organizations for this paper struggled to define the soft skills that they desired in potential new hires, this definition continues to muddy the water as to what a soft skill is and is not. 'Personality-specific' might lean toward saying that the skill is closer to an innate quality than a skill that can be improved upon. And why would executives *not* think about soft skills in a 'you have it or you don't' way? They were educated in

the same system that overvalued hard skills and defined soft skills as 'traits, attitudes, and behaviors—rather than technical aptitude or knowledge (Robles, p. 457). The most important element here is that in none of these cases do the respondents perceive these soft skills as things that can be learned or at least view them as things that they would like new hires to possess in advance, possibly because they are not sure how to teach these skills to someone who they do not think has them.

Most of the interviewees' formal measurements, the interview and resume, for example, do not seem to contain reliable methodologies for measuring character and work ethic. These skills, as I think *work ethic* and *character* should be defined, must be "read" by their evaluator through ancillary activities such as job shadows or on-the-spot scenarios. Employers then must determine with accuracy potential employees' levels of character/work ethic skill. This is a flawed system, and after thinking about the constant conundrums in which this process puts hiring managers, I understood a little better why businesses often complain that they are struggling to find "good people."

The three organizations that decided to participate in the interview process with me were already aware of this problem, and all three wanted to use the interviews to learn about the hiring process from a different perspective. With that in mind, it does not surprise me that these three organizations were already trying to change their hiring practices to reflect the disconnect in what they wanted from new hires and what they were often getting from the hiring pool. It also does not surprise me that most businesses I reached out to did not respond; those non-responses may well speak to the disconnect between post-high school organizations and the education system that is attempting to prepare people for them.

The interviewee from the department store organization, after speaking about all the different ways in which learning is integrated into their organization's culture, said that they base their positions, both in terms of hiring and promoting on "skill and ability." At first, this criterion sounds misaligned or at least a little tangential considering their emphasis on learning. However, the criterion might hint that the organization does not consider "learning" to be a skill but instead a catalyst for skill and ability. Thinking about skill and ability as two separate things feels a little counterintuitive to this conversation. Most definitions of a skill speak towards one's mastery of an ability. Regardless, thinking about learning in these different, implied ways makes the conversation more difficult to manage and progress.

This notion of being unsure how to categorize learning from this study's interviewees is consistent with the national literature around employers' perceptions. The National Association of Colleges and Employers (NACE) conducts a survey annually into what are the key attributes they want to see on college graduates' resumes. One of the most desired skills/qualities—the survey and article seems to be using those two terms synonymously—was flexibility/adaptability. Both of these terms have 'ability' attached to them but are not being viewed as skills, necessarily. Regardless, I am not sure how someone can be adaptable without the ability to learn. However, I am equally not sure how I would begin to look for 'adaptability' on a resume.

All three organizations valued learning. They wanted to learn from me just as much as I wanted to learn from them. I would posit that they see the value in learning, but as an organization learning is usually at most their secondary goal. Perhaps the department store organization is the closest to a primarily learning institution, but a culture of learning does not always mean that the methodology is sound.

Measurement is a concept with which the educational field has a lot of experience. Educators teach a skill and then evaluate how well their students know that skill based on assessments, both formal and informal. Based on those assessments as measurements of skill ability, educators can then make decisions on what to teach next. Should they reteach because the assessment showed that many students had not entirely grasped the concept or can they move on to what is next because the assessment showed student proficiency in the concept? Based on this cycle, I would argue that the job of an educator is just as much about the evaluation process as it is 'teaching.' That evaluation process means understanding what you are measuring, creating assessments that align with what you are trying to measure, and assessing, constantly. Time and time again, in each of the three interviews, I asked questions surrounding how the organizations measured the skills they purported to desire in potential candidates. They humbly answered that their systems of evaluation were not perfect.

Once again, it's a lot to ask of a company: to put learning first. Trust in the process is required, and it is difficult to trust a process of learning if that is not your foremost area of expertise. Succi and Canovi (2019) in their research surrounding soft skills enhancement of graduate employability, gave the recommendation that HEIs need to work with companies to increase students' awareness and guide them to take more individual responsibility to acquire, develop, and adapt their soft skills abilities to improve their employability. Though I agree that companies and HEIs need to be more vocal about soft skills' positive correlations with employability, telling someone they need to work on something without providing them with the structure to obtain those skills seems inefficient in the least and negligent in the most, especially from HEIs. Educational institutions exist for the purpose of helping students to acquire

knowledge and build skills. This seems like the perfect opportunity for educational institutions (HEIs and K-12) to consider which skills should be primary in their curriculums.

Soft skills research needs to be more and more in the public discourse. The communication must be explicit enough to encourage those organizations to ask the education system for what they want, which will require shared language that accurately differentiates a behavior from a skill, for example.

Findings from the Survey Quantitative Analysis, Specifically

First, it must be said that based on the top four, middle three, and bottom four skills all being grouped the same across sample groups, there seems to be a shared understanding of what is thought to be most and least important skill-wise among the surveyed population of educators. This shared understanding projects as alignment of what is internally valued, which matters in the sense of future collective efficacy towards adjusting the current CCSS to include, explicitly, the teaching of soft skills.

Another interesting pattern, especially related to the goal of trying to find out how the 'education chain' is communicating, can be seen in where the elementary, middle, and high school samples agreed with each other and where their opinions differed, even if the difference was slight. The middle and elementary educator samples differed on their rankings of resiliency and critical thinking, ranking them four and two and two and four, respectively. Elementary and high school educator samples both ranked critical thinking and resiliency in that order, while the middle school educator sample had resiliency as more important than critical thinking.

Both resiliency and critical thinking are often taught in conjunction with other skills, and thus some inferences could be made into why resiliency is thought to be more important from the middle school educator sample. For instance, is it possible that resiliency is a concept that

becomes a little more apparent and necessary as children get a little older and what they are learning and experiencing becomes more complex? If so, then it is possible that resiliency is taught more at these levels in response to the children's needs influencing the middle school educator sample to view resiliency as a more necessary skill than critical thinking. These are the types of questions that I think these data can introduce to the conversation around what skills should be taught, questions that deserve and need more discussion.

The small difference in means between the first-ranked and fourth-ranked skills is interesting, especially once we look at Tables 2 and 3. None of the sample groups had a difference in means of more than 1.4, implying that even if individual participants may have differed on the order of their top four, the top four itself remained relatively similar across sample groups.

One evident pattern that emerged is that there is a clear top six skills before a large, in comparison, change between skills six and seven. Leadership was the seventh skill for all three sample groups, and the separation between six and seven in terms of means is larger than the separation between any of the other positions. This might show that there is a debate between clusters of skills in terms of their rank order, but they may be thought of in tiers. To that point, of the six hard skills chosen, having reading and writing as the only two hard skills in the top seven alongside all of the soft skills presents a lot of opportunity for inference as to why.

Reading and writing are often associated with each other and are sometimes thought of as either the same skill or at least correlated; if someone is a skilled reader, we tend to think that person is also a skilled writer and vice versa. This is, of course, an inaccurate generalization and a misnomer to say that one is conditional on the other but saying that skill level in one can be helpful in the accumulation of skill level in the other does not seem that overreaching of a

statement. Regardless of their connection to each other, a more profound connection might be between reading and writing and interpersonal communication. Reading is the receiving of messages in written form and writing is the sending of messages. If communication is the process of sending and receiving messages, then being skilled in reading and writing might be a part of someone's interpersonal communication skill level, the skill that the overall sample group deemed to be the most important for post-high school success.

I mentioned in the Results section that the difference in means for the first through fourth ranked skills was very similar, implying that even if the order varied some between the top four, the top four itself did not vary much. I think there is an argument to be made here that this might be the result of the abstract nature of the soft skills in question. Interpersonal communication, for example, covers a wide breadth of skills, as conveyed in the interviews, which connected the concept of communication to teamwork, leadership, and learning. Resiliency might feel even more abstract. If asked to teach resiliency, how does a classroom teacher measure a student's resiliency? How do you give a pre-test and post-test for resiliency? And now I will raise probably the largest philosophical question that must be addressed in the teaching of soft skills: does the fact that we do not currently know how to measure and teach soft skills explicitly mean that we should not be trying to do so? Whether we decide to do something should almost never be contingent solely on whether we already know how to do it. That seems antithetical to the process of learning.

The bottom four skills all being important STEM career-related skills was a little unexpected. STEM careers are culturally and societally viewed positively. People who have STEM jobs are often thought of in high regard based on their expertise and attributed salaries. Schools, especially at the high school level, have become increasingly oriented around the

proliferation of STEM jobs in a variety of ways (CCSS, CTE programs, etc.). Are educators thinking that these skills are very important in certain fields but not versatile enough to be prioritized for most students? I would be curious for someone to dive deeper into the conversation across educator groups in this area. As mentioned in 'Limitations' my study is not concerned with what classes the educators were teaching when surveyed, but seeing all four hard skills associated with STEM careers in the bottom tier makes me wonder if there are other variables involved with the answers.

For instance, Algebra is not taught in elementary, and specialized STEM skills like indepth scientific research are not addressed in elementary or middle school much more than at the hypothetical level. Elementary and middle schools are focusing on building skills that are preparatory for these more advanced STEM skills that are often introduced and mostly only expanded upon late in a student's high school years, usually not until they are juniors or seniors. Would a question or a series of questions that asks educators about their subject specializations in a survey similar to this one yield some evidence of bias towards their subject areas or against subject areas that are not their own?

Findings from the Survey Qualitative Analysis, Specifically

As many of the responses from educators implied, teachers are always thinking about their students' needs. These responses and the theme of lifelong/versatile learning skills highlight how teachers are tasked with the impossible, preparing students for the future when the future is not known. Their approach in wanting to teach kids skills that they can use and will be useful to them, regardless of their chosen paths later in life, displays the meta game educators face: They must teach in service of their students' future needs, and from the educators' responses, it seems like they want to teach the most versatile, long-lasting skills possible in the limited time that they have students each year. Cimatti (2016) points out that schools "must provide students with soft skills not only to find a job, but to flourish as human beings and citizens" (p. 103). This adds a new wrinkle to the concept of a student's future needs. Many of the teachers' answers followed a similar reasoning, as they hinted that these skills would prepare their students for the "real world" or "life's challenges" or similar phrases that are not specifically connected to employability. With this amount of direct applicability and perceived necessity, the most important thing to ask should no longer be 'what should we prioritize more: hard or soft skills?' but instead 'how should we prioritize soft skills?'

Based on the educators' responses and interviews with organizations, interpersonal communication might be the easiest to convince those outside of education of its necessity in explicit curriculum. People do not seem to need to be convinced of the efficacy of learning 'people skills.' However, knowing that it is helpful, even necessary, does not mean that there is a consensus of what explicit interpersonal communication curriculum might or should look like. I can't help but note the irony in discovering through this study about the misalignment in the communication of the education chain that the skill that might be most important for us to be teaching is communication.

Cross-Cutting Findings of the Study as a Whole

Communication in the education chain has quite a few breaks. On the K-12 end, educators seem to support the addition of soft skills to curriculum in more explicit ways. All the way at the other end of the post-high school chain, hiring managers seem to be valuing communication, character, work ethic, and learning, and are trying to hire people who have those skills, even if they are not sure whether to call them skills or behaviors. Those involved in the chain and affected by the spots where it disconnects must vocalize the need for soft skills to be

taught explicitly. In the same breath, it seems as though it is becoming increasingly necessary to make other skills that are currently a part of CCSS secondary to soft skills. Soft skills' applicability and versatility warrant the need to prioritize them.

Through my research, my recommendation for how to teach these soft skills is by applying Kimberle Crenshaw's intersectionality. Crenshaw (1989) points out the problem of thinking about discrimination as "categorized as singular issues" and the need to "embrace the complexities of compoundedness" (pp. 166-167). Intersectionality then becomes a way to avoid categorization in favor of critically thinking about overarching concepts, in this case overarching skills. Núñez, Rivera, and Hallmark (2020) took a similar strategic approach in trying to expand equity in STEM fields. They saw vast disparities in the number of women in STEM and amongst women, even greater differences and disparities with women of color in STEM positions. The intersectional lens is vital here in critiquing the reasons why so few women of color are in the STEM field as opposed to other intersectional groups. If one does not consider these intersecting identities, they will misevaluate the causes, leading to misaligned efforts of equity often exacerbating the problems with the system, and, most importantly, not helping women of color in a system that is actively harming them.

I think the most palatable way for the education community to think about that term might be through another term: literacy. 'Literacy' has the obvious connotation of being able to read, but the term has become an umbrella term that can attach to a subject matter to show that one is learning to 'read' that subject matter. 'Intersectional Literacy' could be a subject that explores identity in all the complexity it deserves, in which the students learn to understand themselves and how they interact with the world, in essence how to communicate with themselves (intrapersonal communication) and with others (interpersonal communication). In

understanding how vastly complex their own intersectional identities are, students will have a much easier time understanding the vastly complex intersectional identities of those around them, creating the moments of empathetic growth to which so many educators spoke.

Banda (2020) took a similar approach when critiquing disparities for Latinas in engineering departments at HEIs and found similar problems of "marginalization, isolation, and exclusion" (p. 835). If an intersectional lens can be used to evaluate an education institution's disparities in equity, then it follows that we should be able to teach students how to apply intersectionality to their own evaluation needs such as evaluating themselves or the world around them. From the pedagogical angle, that angle that returns us to the purpose of this paper, intersectionality is a lens rooted in problem solving. In Crenshaw's 2016 TED Talk, she talks about how if a problem cannot be named, it cannot be solved, and highlights that single-axis framing intensifies this problem. To Crenshaw, the nuance is essential. We must know the intersecting reasons for a problem, name them with accuracy and honesty, if we hope to solve the problem. Towards the education of future psychologists, Grzanka (2020) encourages psychologists to embrace the possibilities that an intersectional framework can provide for teaching and training of psychologists. What Grzanka suggests—through questions that they view as an evaluative lens psychologists should be taking-incorporates interpersonal communication, intrapersonal communication, and self-evaluation, just to name a few. I propose K-12 education take a similar approach, using an intersectional framework to teach soft skills, and Intersectional Literacy, a shared term, the 'right' shared term, could be the catalyst for the collective efficacy that will be needed if the education chain is going to communicate and then perhaps function as intended, in service of our students' future success.

Implications

In my own practice as a high school English teacher, I am integrating more and more soft skills into curriculum. For example, I use self-evaluation in the form of reflections and questionnaires at the ends of all major units and explicitly emphasize the importance of self-evaluation in the learning process. At the beginning of units, I use intersectionality to frame context of the material around student identity and community so that students can think about their direct and tangential connections to content. I have phased out multiple choice and fill in the blank assignments that focus on the memorization and regurgitation of information in favor of critical thinking assessment questions. Formalized writing assessments such as the classic "five paragraph essay" are still required during the year by most school districts in my area so I use critical thinking as a means of communicating to my students the need for a "beginning, middle, and end" to an argument and thus some rationale for a five paragraph, "intro, body, body, body, conclusion" format.

In the future, as I transition from a classroom teacher role to an administrative one, I plan on supporting my teachers by encouraging them to take soft skills approaches to their required hard skills-based curriculums. In the short term, I think this is the best way for me to integrate soft skills into the classroom while still navigating the very real politics at play surrounding the use of terms that have become politicized such as intersectionality, two concepts that are helpful in student understanding of identity and thus integral to one's ability to self-evaluate.

If I were able to conduct this research again, I would want more specific information concerning perceptions. For example, I would be interested in teacher demographic subgroups to see how their intersecting identities might align with differences in perception of skillset importance. Does perception differ across political lines, Republican or Democrat? Does race play a factor in what is thought to be important post-high school? Gender? Research surrounding

economic disparities correlating with race and gender among other identifiers of oppression and inequity has been well-documented in recent years, and I would be curious if perceptions align with those disparities.

An important takeaway I have from my time researching the conversations with teachers is the vital nature of including teacher voices in future conversations about curriculum, especially standardized, overarching curriculum. Those who spend every day in the classroom seem to be the obvious most qualified candidates to sit on curriculum reform committees. I am not sure why this idea should be considered controversial but based on the way curriculum has been traditionally created and adopted, the pattern suggests teachers are not being considered to the degree they should be.

In the employer interviews, the notion of measurement of skills arose repeatedly. For many reasons, hard skills have traditionally been viewed as easier to measure than soft skills. Measurement is integral to teaching. Assessments are used to evaluate the performance of the student and the teacher. Teachers must be able to evaluate performance not to see who is better than whom but to check for understanding of content/curriculum. More development of measurement tools surrounding soft skills—assessments with well-defined rubrics, for example—would be helpful for students attempting to build soft skills.

Since I started writing this paper on soft skills, I have been forced to self-evaluate my own emotional intelligence and maturity and think about my own intersecting identities of belonging and power. I found out I was and still am horribly lacking in soft skills despite having a bachelor's and a master's, and now, hopefully, a doctorate. I am an emotionally stunted, whitepassing cis man who continues to struggle to notice my own toxic masculinity and privilege. I

need those skills to navigate emotions and interactions so that I do not harm those I love. I am two steps forward, one step backward—on a good day—on my journey toward equity and empathy. In my pursuit of knowledge over the years, like the majority of people in this world, I've never received a formal education in the soft skills that would have aided me, and I am all the worse off because of it. Even writing this, I can't escape my innate selfishness as I frame this analogy here at the end of three years of research around my own unlearned and underdeveloped concept of self. So let me catch myself in my pursuit of myself by changing analogies midstream to something slightly more universal:

Soft skills are a language that we must learn to develop. Yes, there are individuals who seem to have soft skills naturally and self-developed, and we recognize the value of their skills and call them "good people," but we all know *good people are hard to find*. We need to realize that being good—that quality so often viewed as intangible—may well be simply a language that everyone can learn and develop, skills that can be fostered with the right training and expertise. Anyone who has ever learned a new language to the point where it becomes more than a second tongue will tell you that the process takes years and infinite patience, humility, and resiliency, as you fail over and over until you get it finally "right." And as anyone who has ever learned a new language the more you practice and the younger you start.

Appendix A

Teacher Survey

As an educator, you are tasked daily with teaching your students skills. This survey is interested in your experience and expertise in determining which skills are most important for students to learn to achieve *success* after high school.

"Success" here is defined as either:

1.) Able to enter the workforce after high school with a skillset that will allow them to advance

or

2.) Able to be accepted and work towards a post-high school degree

Rank the skills in order of importance to a high school graduate's post-high school success:

Statistics and probabilities Interpersonal communication Reading Scientific Model Leadership Algebra Writing Critical Thinking Self-evaluation Resiliency Scientific Research

Why are your top 3 skills the most important to a high school graduate's post high school

success?

Do the Common Core standards for your grade level prepare your students for post high school success?

If you had complete freedom to create curriculum for your students, what skills would you prioritize to prepare your students for post-high school success? Please list them here.

Why would you choose to prioritize these skills to prepare your students for post-high school success?

Appendix B

Interview Protocol

Directions for the Interviewer

-There are two parts to the interview, one dealing with "employable" skills and one dealing with "promotable" skills. I will balance the amount of time spent on each of the two elements: employable and promotable skills. (This will hopefully help account for some of the possible bias that might occur once the interviewee realizes that the interview is looking for the contrast in between lists.

Materials

-The interview protocol requires access to hiring documents for a new hire position **and** an upper-level position in the company of the employer (a position that is geared towards internal hires). During the setup of the interview, I will establish that there will be access to hiring documents on the day of the interview. (If I have public access to and can print listings from digitally-sourced materials, then I will bring those printed copies to the interview. If these materials are not accessible, I **must** communicate to the interviewee the specific things that are needed for the interview and request that the interviewee either bring printed copies of these or have access to them digitally during the interview.)

Interview Directions

-Give the interviewee the hiring document for the entry level position, a piece of paper, and something to write with.

"Here is a listing for an entry level position at your company. (Give listing to interviewee.) Looking at this document, I would like you to make a list of the five most important skills you see represented here.

(Once the person has listed five skills, I will ask the next question.)

Tell me about that first skill you listed. Why do you think it is important for that specific position?

(I will repeat this process for each of the five skills that the interviewee lists.)

Now that we have talked through why each of these five skills are important for this position, please put the five in order of importance for candidates to be successful in this position, from most important to least important.

Thank you. We're now going to look at a different type of position here.

Example for promotable skills portion:

-Give the interviewee the hiring document for the internally promotable position. "Here is an example of a hiring document for a ______. (Fill in the blank with the specific job title.) On your paper, make a list of the five most important skills from this document in the order that you would consider them if you were promoting someone. Tell me about that first skill you listed. Why do you think it is important for that specific position? (Repeat this process for each of the five skills that the interviewee lists.)

Now that we have talked through why each of these five skills are important for this position, please put the five in order of importance for candidates to be successful in this position, from most important to least important.

Follow-up Questions

During the follow-up process, I may ask the following questions, based on findings that the interviewee appears interested in discussing. It is likely that the interviewee will see some disparity between the skills in each of the listings and thus might want to discuss takeaways or reasons for this disparity. It is also possible that the interviewee will see a very similar list of skills for both job listings or will see a specific skill(s) on both listings.

Some follow-up questions that might yield an enlightening discussion:

-How difficult is it to find adequate entry level candidates?

-How difficult is it to find adequate internal promotion candidates?

-Which type of position would you consider more difficult to find candidates to hire and why? -What are the gaps in skillsets, for either entry level or internal promotion candidates that you see? To what do you attribute those gaps?

-If you had the opportunity to provide input on what skills should be taught in schools, what sort of suggestions would you make?

-Do you have any questions for me?

(If they do, I will respond to them.)

Thank you so much for your time today. I truly appreciate your willingness to meet with me. If you would be interested in the final results of my study, please let me know. I would be happy to email you a PDF of the final paper once it's done this spring.

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