A collaboration among Geisinger Commonwealth School of Medicine, Johnson College, Keystone College, King’s College, Lackawanna College, Luzerne County Community College, Marywood University, Misericordia University, Penn State Scranton, Penn State Wilkes-Barre, The Wright Center for Graduate Medical Education, University of Scranton & Wilkes University
The Institute is a non-profit research organization dedicated to empowering business and community leaders with research based strategies for informed decision making. We conduct independent, non-biased research to identify the opportunities, issues and challenges unique to the region and find innovative solutions to help solve the problems facing our communities. The Institute also offers a wide array of research, consulting and support services to help organizations boost productivity, increase profitability and be successful in their missions.

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- education
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- housing
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- infrastructure
- land use
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- tourism and arts & culture
- transportation
- workforce development

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- Indicators – Indexes
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- Policy Analysis
- Program Evaluation Support
- Project Analyses and Monitoring
- Research Validation and Peer Review
- Tourism Strategic Plans
- Workforce Studies
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Preface

In June 2019, the Education & Workforce Development (Ed/WFD) and Jobs, Economy, & Economic Development (JEED) Task Forces met to discuss the release of the Economic Competitiveness report presented at Indicators 2019 and to identify a research agenda for the 2019-2020 year.

It was determined at that time that this upcoming year’s research should again be a joint effort because of the nature of the two task forces is extricably linked especially since there was a workforce shortage at the time that was predicted to last at least two decades.

Based on discussion, it was decided that there were several education and workforce related sections in the economic competitiveness report that should be elevated to their own research brief and that several areas were not addressed.

Therefore, the following sections of the report have been developed into stand-alone research briefs:

- Skills Shortages
- Labor Demand
- Industrial Automation
- Comparative Analysis of Job Opportunities and Higher Education Completions

The following new briefs were developed in the fall 2019 – winter 2020 time frame:

- Rethinking the Senior Worker
- Adapting to the Millennial Worker & Beyond
- Soft Skills & the Workforce
- Rethinking the Trades – Regional Opportunities

With the recent economic challenges of the current pandemic, some of this research reflects economic circumstances that have been upended, at least in the short-term. However, it should be noted that the data serves as a pre COVID-19 baseline in order for us to evaluate changes.

Further, as we move through recovery and reach February 2020 economic activity, the labor shortage may be center stage again. Therefore, the information outlined in these briefs is pertinent and gives employers an opportunity to plan for the future in a more informed and thoughtful way.
What Are Soft Skills?

On a high level, recruiters define *Soft Skills* as interpersonal (people) skills. They include communication skills, active listening, and empathy.) They also pertain to the ability to work on a team, flexibility, problem-solving, critical thinking, creative thinking, attitude, adaptability, ethics, time management, and conflict resolution.

While hard skills result from education and training, soft skills are sometimes innate like personality traits and emotions, and sometimes learned at home through sibling interactions and parental modeling. Sometimes they are even acquired through activities in the classroom that are really designed to promote an understanding or application of hard skills.

Soft skills are not new, but they have gained prominence in the past decade as employers perceive an absence of certain necessary soft skills. In 1918, Dr. Charles Rigborg Mann indicated that than an overwhelming majority of job success comes from strong soft skills with the remaining small portion coming from the hard or technical skills to do the job. (Mann 1918) Mann’s survey data came from practicing engineers across the country. Whether the issue is due to parenting, technology, or schooling, the perceived absence of soft skills is a hot topic among employers of all type, sizes, and locations.

Google conducted a study of hiring, firing, and promotion of all of its employees since the company’s inception in 1998 through 2016. *Project Oxygen*, as it was called, collected the employee data for analysis. The results determined that STEM skills ranked last in the traits of a successful employee. The first seven included being a good coach, communication skills, processing insights into others and different values and points of view, empathy toward coworkers, critical thinking, problem solving, and drawing conclusions.
Why Are Soft Skills Important?
The Omnia Group, an employment services organization, suggests that the top seven soft skills needed in today’s workforce include leadership, teamwork, communication, problem-solving abilities, work ethic, flexibility/adaptability, and interpersonal skills. These strengths enable an organization to be highly productive, innovative, and more successful as employees have a stronger insight into each other, the customer, and how to position the company for success. Furthermore, the employees enjoy harmony and happiness in the workplace due to the empathy and understanding in their interpersonal relationships. This in turn improves efficiencies. Soft skills – or people skills – are critical to attracting and retaining clients as well.

It is important to note that the soft skills referenced are present in every person at an all-or-none basis. Some individuals have incredible people skills, but lack good time management abilities. Soft skills can be learned, but for many the challenge is acknowledging the need for improvement in a particular area. Self-reflection is a soft skill in and of itself. Employers face challenges as well, because many elements of soft skills are subjective. Some issues, such as missing deadlines and repeatedly arriving late to work, are easy to measure; others, such as those pertaining to problem-solving and communication, are more difficult to convey. A manager must be able to reference specific circumstances where lack is apparent. It is a delicate issue as well, because addressing a deficiency in a soft skill may feel like a character attack to another person.

Depending on the nature of the job, an individual with impeccable soft skills may be the better candidate than one who has practical experiences but lacks in soft skills.

Soft Skills Data
This brief was prepared during the height of the COVID-19 pandemic, specifically, at a time when many businesses were negatively disrupted. Some business disruption has been positive, however. As of April 29, 2020 there were 14,179 job openings available in Lackawanna and Luzerne Counties, covering 567 occupations with 8,700 job titles from 3,700 employers. The jobs require five different education levels, 195 certifications, and 1,100 hard skills. The employers noted 103 different soft skills.

The top ten occupations include jobs that require high school education through bachelor and master degrees, as well as some technical education and certifications.
## Occupations

<table>
<thead>
<tr>
<th>SOC</th>
<th>Occupation</th>
<th>Total Ads</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>Retail Salespersons</td>
<td>777</td>
</tr>
<tr>
<td>29</td>
<td>Registered Nurses</td>
<td>677</td>
</tr>
<tr>
<td>53</td>
<td>Heavy and Tractor-Trailer Truck Drivers</td>
<td>483</td>
</tr>
<tr>
<td>41</td>
<td>First-Line Supervisors of Retail Sales Workers</td>
<td>465</td>
</tr>
<tr>
<td>53</td>
<td>Laborers and Freight, Stock, and Material Movers, Hand</td>
<td>381</td>
</tr>
<tr>
<td>21</td>
<td>Social and Human Service Assistants</td>
<td>379</td>
</tr>
<tr>
<td>35</td>
<td>Combined Food Preparation and Serving Workers, Including Fast Food</td>
<td>362</td>
</tr>
<tr>
<td>43</td>
<td>Customer Service Representatives</td>
<td>320</td>
</tr>
<tr>
<td>53</td>
<td>Driver/Sales Workers</td>
<td>291</td>
</tr>
<tr>
<td>37</td>
<td>Janitors and Cleaners, Except Maids and Housekeeping Cleaners</td>
<td>286</td>
</tr>
</tbody>
</table>

Source: JobsEQ®
Data reflect online job postings for the 30 day period ending 4/28/2020

Therefore, regardless of education and hard skill level, 103 soft skills are recognized in each occupation. The top 25 skills and the number of ads referencing them are noted below. This validates the importance of soft skills to employers regardless of the education level attained by the potential employee.
<table>
<thead>
<tr>
<th>Skill Name</th>
<th>Total Ads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication (Verbal and written skills)</td>
<td>5,335</td>
</tr>
<tr>
<td>Customer Service</td>
<td>2,878</td>
</tr>
<tr>
<td>Cooperative/Team Player</td>
<td>2,732</td>
</tr>
<tr>
<td>Self-Motivated/Ability to Work Independently/Self Leadership</td>
<td>2,000</td>
</tr>
<tr>
<td>Adaptability/Flexibility/Tolerance of Change and Uncertainty</td>
<td>1,917</td>
</tr>
<tr>
<td>Organization</td>
<td>1,684</td>
</tr>
<tr>
<td>Detail Oriented/Meticulous</td>
<td>1,656</td>
</tr>
<tr>
<td>Ability to Work in a Fast Paced Environment</td>
<td>1,399</td>
</tr>
<tr>
<td>Interpersonal Relationships/Maintain Relationships</td>
<td>1,123</td>
</tr>
<tr>
<td>Accountable/Responsible/Reliable/Dependable/Trustworthy</td>
<td>1,121</td>
</tr>
<tr>
<td>Supervision/Management</td>
<td>1,004</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>957</td>
</tr>
<tr>
<td>Multi-Task</td>
<td>794</td>
</tr>
<tr>
<td>Enthusiastic/Energetic</td>
<td>736</td>
</tr>
<tr>
<td>Work Ethic/Hard Working</td>
<td>696</td>
</tr>
<tr>
<td>Punctual</td>
<td>620</td>
</tr>
<tr>
<td>Time Management/Time Utilization</td>
<td>611</td>
</tr>
<tr>
<td>Prioritize</td>
<td>554</td>
</tr>
<tr>
<td>Leadership</td>
<td>544</td>
</tr>
<tr>
<td>Optimism/Positive Attitude</td>
<td>475</td>
</tr>
<tr>
<td>Good Judgment</td>
<td>474</td>
</tr>
<tr>
<td>Analytical</td>
<td>443</td>
</tr>
<tr>
<td>Coachable/Willingness to Learn</td>
<td>414</td>
</tr>
<tr>
<td>Initiative</td>
<td>398</td>
</tr>
<tr>
<td>Listening</td>
<td>390</td>
</tr>
</tbody>
</table>

Source: Jobs EQ. Data reflect online job postings for the 30 day period ending 4/28/2020
Selected Research

Angela Duckworth is the creator of the Grit Scale. The Duckworth Grit scale measures grit, or perseverance and self-control. The scale indicates that if a person has these two traits, they are likely to be a high achiever. Duckworth describes perseverance as the tendency to sustain interest in and effort toward very long-term goals, and self-control is simply the ability to manage impulse behaviors without succumbing to instant gratification). Grit scales, which can be used in children and adults, are useful tools for educators to measure changes in students and for employers as part of a pre-employment testing phase. Duckworth’s early research indicated that noncognitive traits deserve attention as major factors in predicting success. Duckworth followed Darwin’s theory that “…cognitive ability must matter,” but added, “I have always maintained that, excepting fools, men did not differ much in intellect, only in zeal and hard work; and I still think this is an eminently important difference.”

Researcher Dr. Brene Brown focuses her work on the trait of vulnerability in leadership. The premise is that vulnerability is about being real and imperfect, and that it is important to share that authenticity with employees through action. For example, admitting to a mistake and asking for help demonstrate vulnerability. Leaders who are willing to show their vulnerability are well positioned to bond with their employees. This connectedness increases workplace productivity and employee engagement. Furthermore, leading by example can help develop the appropriate soft skills in others. Brown has identified five attributes that improve organizations. They include:

- Authentic relationship
- Great ideas
- Less pressure
- More empathy
- Team success

Authentic relationship brings trust, which improves the workplace environment and productivity. It also spawns more creativity as everyone feels encouraged and comfortable participating in idea generation and problem-solving. Minimizing pressure in the workplace helps foster personal responsibility as well. Furthermore, empathy is known to lead to better performance and team cohesiveness. Such collaboration thereby improves success rates.

Recommendations

Learning the core competencies of a soft skill and working to master the core competencies of that particular trait will support the implementation of positive habits, leading to the development of the skill.

For example, positive attitude has been identified as a needed soft skill. Being flexible, managing emotions, listening actively, and embracing challenges are some competencies of developing a positive attitude. Some basic principles such as avoiding negativity, expressing gratitude, and reward oneself will lead to enhanced positivity.

Adopting the behavior of a respected individual or a mentor is another good method to improve soft skills.
For Educators

Much of public education focuses on teaching foundations as opposed to critical thinking, but opportunities do exist to teach critical thinking skills while focusing on foundational learning.

Pennsylvania has laid the groundwork for developing emotional intelligence through Career Ready Skills PA initiative, which began implementation in 2019. It aligns with the Pennsylvania’s Career Education and Work Standards but is geared toward competencies in several areas – self-awareness and self-management, relationship building and management, and problem solving. The Pennsylvania Department of Education developed a curriculum that begins in Pre-K with age-based skill development. There was acknowledgement that soft skill development can begin as early as Kindergarten using appropriate behavior modeling and developing a child’s emotional intelligence. There are a number of products aimed at helping teachers at all levels help their students develop their soft skill potential.

Development of soft skills can be incorporated into many types of curriculum or taught on its own, and educators at all levels can blend the two options. For example, group projects are ideally suited to better understanding teamwork. They are fairly common in high school and college, but students are not taught about how to work in a group, what good teamwork is, or about general group dynamics prior to working in those groups. Without this education, students are not likely to develop good collaborative strategies.

High schools and college and universities benefit in many ways from relationships with local employers. Understanding the needs of employers in the workplace and developing solutions through coursework and service learning is key. For example, communication classes can play a vital role in teaching stronger communication skills for the workplace if it is done through an applied process with input from employers. Internships and service learning are also opportunities for soft skill development.

For Parents

Given economic conditions, many parents also work multiple jobs and lack sufficient opportunity to focus on this development. Frankly, some parents don’t have strong soft skills and may sometimes be unable to model constructive behaviors to their children.

Regardless of the circumstances, there are resources to help parents teach their children soft skills. Many exist online, but another option is to have the conversation with each child’s school teacher so both can work together to enhance the student’s skills.

For Employers

Employers have the opportunity to help new hires through initial training and orientation programs as well as mentoring programs. Mentoring programs can help new hires learn unspoken or informal traits that are helpful in the workplace that are difficult to teach in educational curricula, and can be rewarding for both the mentor and mentee. There are numerous online resources to guide such efforts, and there could be opportunities for educational institutions, business organizations, or economic and workforce development agencies to spearhead the effort to expand mentoring programs in workplaces.

As referenced earlier, employers can work with local education institutions to identify needed soft skills and work through applications to develop them. They can do so through existing required coursework, new classes, continuing education classes, or certifications.
Over 100 years of data demonstrate the importance of soft skills in careers, their value to employers, and their benefit to the community in general. Nonetheless, many workers remain notably deficient in these areas. This creates an incredible opportunity for employers, educators, and parents to collaborate for comprehensive, long-term solutions.
References

C. Darwin, The Correspondence of Charles Darwin (Cambridge University Press, 1869).


