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Identification of Employability Skills for High School Curriculum Development: A Survey

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Abstract

Research has shown that employers like to hire individuals who have adequate employability skills and are ready to work. Teaching employability skills to students with disabilities becomes an important way to prepare them for employment after high school graduation. However, there is a lack of an adequate employability skills curriculum that can be implemented in high schools. With a goal of developing a curriculum for employability skills training, we sought opinions from national transition specialists, state transition specialists and school district transition specialists through an online survey and identified four skill areas and forty-eight specific skills that were viewed as important for these students with disabilities to gain entry-level employment upon graduation from high school.

Keywords: Employability skills; Job skills for IDD; Job retention for IDD

Abbreviations: IDD: Intellectual and Developmental Disabilities; IDEA: Individuals with Disabilities Education Improvement Act; NCD: National Council on Disability; TEA: Texas Education Agency

Introduction

Employment has positive impacts on social interactions, living arrangements, self- perspectives and self-esteem, economic safety, and productivity [1-3]. The ability to obtain and maintain employment is an important predictor of physical and mental health and quality of life [4]. People have an inherent need to be engaged and productive members of society [5], and this opportunity is mostly provided via work. Employment provides manifest (i.e., financial) and latent (i.e., psychological) benefits to all people, with or without disabilities [6,7]. When employed, individuals often experience an increase in status, power, financial independence, social support, and recognition [8]; while those who are unemployed do not have certain fundamental psychological needs met for their well-being, including time structure, social contact outside of immediate family, being part of a collective purpose, being engaged in meaningful activities, and having social status [7,9]. Longitudinal studies have found that engagement in the workforce is associated with better mental well-being, lower prevalence of depression, and lower incidence of suicide [10].

Similarly, employment is a fundamental aspect for the well-being of people with disabilities. There are many physical, social, and emotional benefits of employment for individuals with intellectual and developmental disabilities (IDD). First, employment offers access to health-promotion programs that are essential for people with IDD to maintain their health. In a study of 3,076 participants from the Behavioral Risk Factor Surveillance System, it was found that the probability for employment is greater for people with disabilities who engage in physical activity [11]. Individuals with IDD who were employed also enjoy better health outcomes. In a study of 810 participants ranging from 18-64 years old, Hall et al. [12] found that any level of paid employment was significantly associated with lower rates of smoking, better quality of life, and better overall health than people without employment.

Because of the benefits associated with employment, most individuals, including those with an intellectual or developmental disability, wish to engage in meaningful work [9]. Federal legislation also supports individuals with disabilities in gaining

employment. For example, the Individuals with Disabilities Education Improvement Act (IDEA) of 2004 states that a central purpose of special education is to "prepare [students with disabilities] for further education, employment, and independent living" as part of a national policy aimed at "ensuring equality of opportunity, full participation, independent living, and economic self-sufficiency for individuals with disabilities" (Public Law 108-442).

Unfortunately, individuals with IDD have been identified as a population with increased risk for unemployment [13] and job dissatisfaction [14]. A report by the U.S. Census Bureau [15] indicated that unemployment for individuals with disabilities was 7.3%, which was almost twice as much as for individuals without disabilities. As a group, individuals with disabilities have achieved poorer employment outcomes compared to people without disabilities. According to a progress report (2011) from the National Council on Disability (NCD), individuals with disabilities continue to encounter employment problems such as lower employment rates and lower annual earnings. The U.S. Bureau of Labor statistics reported that only 17.9% of people with disabilities were employed compared to 65.3% of those without disabilities. The median income for the former group is much lower ($23,848) than that of the latter group ($62, 937) (U.S. Census Bureau, 2015 & 2017). In a recent study, Ju et al. [16] analyzed vocational rehabilitation data from one state and found that, although over 94% of the individuals are employed in integrated settings, the average weekly wage is only $9.39. It should be noted that this hourly income is above the national minim wage, although it is not a living wage.

Researchers have identified barriers that hinder employment outcomes such as misconceptions about people with disabilities, the lack of accommodations, severity of a disability, and the lack of adequate preparation needed to obtain and maintain meaningful employment [17,18]. One of the major obstacles that impedes people with disabilities from obtaining employment is the lack of employability skills. "Employability skills" refer to general and nontechnical competencies required for performing all jobs, regardless of types or levels of jobs. They are not job specific but are considered attributes of employees that make them an asset to employers [19] and are "skills which cut horizontally across all industries and vertically across all jobs from entry level to chief executive officer" ([20], p. 16). Studies revealed that employers expressed concerns on whether people with disabilities have necessary work-related skills and personality attributes [21]. Unemployment and job loss are associated with concerns on inadequate work skills, poor attendance, work behaviors, ability to follow instruction, communication, personal appearance, and safety [22-24].

Employability skills are important for job search and retention. Employers' negative attitudes and stereotypes towards the employability for people with disabilities often become a barrier of hiring. Ju and colleagues [25] developed a survey to investigate employers' expectations on employability skills for entry-level employees with and without disabilities. They identified five domains of employability skills, including: Basic Skills, Higher Order Thinking Skills, Basic Work Skills, Social Skills, and Personal Traits that were considered as essential for entry-level employees. These researchers recommend that any efforts toward promoting employment outcomes for people with disabilities should target these basic employability skills.

Other research also shows that employers like to hire individuals who have adequate employability skills. Often times, certain experiences for individuals with disabilities lead to job loss including inadequate work skills, poor attendance, abusive behaviors, refusal of instructions, tardiness, appearance, and safety [22-24].

In response to employers' demand, high schools have started to recognize the need to include employability skills lesson plans as part of their career readiness curriculum. However, there is a lack of adequate curriculum that is specifically designed to teach employability skills to students with disabilities. Hence, there is a need to develop a high school curriculum focused on developing identified employability skills. On the other hand, educators' perspectives on employability skills are important because their attitude and value toward the importance of these skills play an essential role in their willingness to teach these skills and determine which skills to focus on. Understanding their perspectives assists the development of an employability skills curriculum. Yet, most research on employability skills for students with disabilities target employers or focused on social skills [26]. There is a lack of research on educator perspectives on employability skills for individuals with disabilities. To develop a much-needed curriculum, it was necessary to first identify a specific set of employability skills essential to job retention and success, as viewed by educators.

The purpose of this survey study was to identify educators' perspectives on specific set of employability skills that are important for students with disabilities. Findings of this study will be combined with employer perspectives found from prior research to assist with our development of a curriculum aimed to serve high school students with disabilities. The long-term goal is to develop a basic employability skills training curriculum which is innovative and based on research evidence. Research questions included: (A) Among a list of employability skills in each of the four skill areas, what skills are considered as needed for entry-level employees and what skills are rated as important? (B) Are there any differences associated with respondents' age groups and genders? (C) Which of the four skills areas are more important than others?

Method

Participants

Participants for the survey were restricted to individuals in Texas who typically work with students with disabilities during the transition from high school to the workforce. The sample was

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recruited by utilizing the snowball sampling technique, which allowed the researchers to approach possible participants with rapport because the researchers were supported by a mutual person. The snowball sampling technique features a random sample of individuals drawn from a finite population. Each participant is asked to refer or recommend a different individual ([27] p. 148). This method was selected given the literature supporting this method when working with narrowly defined populations in order to obtain qualitative expert judgement [28,29].

As a first step, we identified Transition/Employment Services Designee across all school districts, charter schools and private schools in Texas from the websites of Texas Education Agency (TEA) and school districts across Texas. Next, we identified the State transition specialists (Vocational Rehabilitation Counselors) working with the Texas Workforce Commission (28 Texas Workforce Development Boards) via the Legal Framework for the Child-Centered Special Education Process and the Region 18 Education Center websites. When the survey cleared the Research Compliance office, we recruited from the 26 TEA Education Service Centers to identify transition specialists in urban, rural, and suburban school districts. Initial contact with participants was made individually to their work address. The research team was able to launch the survey and send it to participants on our list. Participants were also asked to share the survey with others that may have experience and expertise in the field of transition.

Three hundred subjects were recruited to take the survey, with 105 completing it, representing a 35% participation rate. Participants received an email with an active Qualtrics survey and completed the survey confidentially. The second question on the survey asked for consent to continue with the survey. At that point, the participant had the choice to discontinue the survey.

Instrument

We developed the survey based on previously published literature that identified essential employability skills for entry-level employees [25]. These previously identified employability skills were compiled into a new questionnaire/survey that assessed the value and frequency of employability skills in the workplace. The survey was sent to experts in the field for feedback. One suggested revision was to revise the verbiage of the skills so that students are able to show skills with the aid of adaptive devices if needed. Another suggested adding specific skills about maintaining personal space, appropriate non-verbal communication, appropriate professional appearance, and generally appropriate dress for different experiences. Other suggestions included adding behavioral skills such as respecting others and appropriate cell phone usage. We adopted these suggestions in subsequent revisions of the instrument.

The final survey included a list of 48 employability skills divided into four general domains: (a) basic skills, (b) higher order thinking skills, (c) basic work skills, and (d) personal traits. Each of the four domains contain 10-15 items. The basic skills domain includes abilities to read with understanding, listen actively, speak so others can understand, and convey ideas in writing. Higher order thinking skills include abilities to recognize and correct own mistakes, apply basic mathematics, solve problems, negotiate and resolve conflicts, apply basic computer skills, and make plans and work towards goals. Basic work skills include abilities to be on time, seek help when needed, follow schedules, cooperate with others, stay with a task until finished, work well with people with diverse backgrounds, monitor quality of work, show respect for others, use socially acceptable language, accept authority, maintain appropriate personal appearance, accept criticism, and work without direct supervision. Personal traits include demonstrating personal integrity/honesty in work, demonstrating responsibility in work, demonstrating ability to adapt to change, motivation towards work, personal interest in work, ability to evaluate and monitor own performance, having a personal vision and goal, being assertive, showing initiative towards work, showing confidence, and advocating for self.

The survey was designed for completion by professionals related to transition services (i.e., Texas Workforce Counselor, K-12 special education teacher, university/academia, consultant). Additional demographic questions (e.g., race, age, professional experience) were included. The survey was available for participants online through the web based Qualtrics system via email invitations. To complete the survey, participants would rate which skills as the most essential for employment using a 5-Point Likert scales: “strongly agree,” “agree,” “neither agree nor disagree,” “disagree,” and “strongly disagree”.

Data analysis

A five-point scale of value was employed for participants to identify the value of each employability skill and the frequency of usage of the skills. The survey questions on value and frequency were split up as well, with skills being identified based on the value of the skill in employment and frequency being identified by how often the skill is to be used. To analyze the data, the values of skills were coded by a corresponding value of 1 to 5 (1 = strongly disagree, 5 = strongly agree). An initial analysis of variance based on the percent agreement between the participants’ scores was performed. This analysis allowed researchers to analyze the level of agreement participants were having on each skill, as well as the level of variance between participants. For the benefit of interpretation and analysis, both the mean (M) scores and the variance between levels of agreement on each item were explored and presented. This allowed for both a visual and statistical analysis. While the variances between levels of agreement on most items were low, some differences did exist between levels of agreement around specific items, such as how often employees would use basic communication skills or follow a list. These differences between the percentage of agreement and the mean score indicated that participants could have placed a higher value on the need/usefulness and regularity of the skills usage.

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The correlation between responses around the degree that skills were identified as important, and their frequency of usage was also explored. Frequency was scored within the range of "not at all" (1), "rarely use" (2), "monthly use" (3), "weekly use" (4), and "daily use" (5) with "weekly" (4) and "daily" (5) being identified as most frequent usage. However, normality was violated, the results did not fit the normal distribution overall, and variance could not be accounted for, so a Brown-Forsythe test was employed for a better exploration between importance and usage. While these were only descriptive in nature, they provided the researchers with the opportunity to identify initial levels of agreement and frequency values around how often skills were used and how valuable they were in the workplace, which could then be compared to their actual values and the significance of these values.

After the above analyses of the data, based on the level of agreement, the research team proceeded to run Two-Way analyses of variance (ANOVA) and reviewed both the values placed and the level of correlation between the skills and the perceived frequency of their usage. For this data run, the skills values and frequency rates were being treated as the dependent variables, while the population characteristics were treated as the independent variables. However, during this run the normality check employed (Shapiro-Wilk's Test) to identify normality was violated. The initial assumption would have been that there would be a linear relationship between the pairs and the scores, as well as a level of normality, that the scores would be normally distributed. This was likely due to the high level of value placed on each skill and frequency that resulted in high scores along both sides of the test. As normality was violated an exploration of the scores based on level of agreement was needed. To understand the data, an additional test was run, and the percent agreement was also presented.

Results

Basic skills

With regard to basic skills, the participants were asked to rate their agreement on the importance/necessity of certain skills in the workplace. Participants were then asked to identify the frequency of using these required skills. Those skills identified as the most important were: "ability to follow instructions", "ability to show a high regard for safety protocol", "ability to listen actively", "ability to learn new skills", and "ability to interpret verbal and nonverbal communication (Table 1). The "ability to follow instructions" was rated important with an "agree" to "strongly agree" rate of 84% (M = 4.82, SD = .54) among participants. The "ability to show high regard for safety procedures" was rated important with an "agree" to "strongly agree" rate of 85% (M = 4.67, SD = .60) among participants. The "ability to listen actively" was rated important with an "agree" to "strongly agree" rate of 85% (M = 4.64, SD = .61) among participants. The "ability to learn new skills" was rated important with an "agree" to "strongly agree" rate of 79% (M = 4.31, SD = .71) among participants. The "ability to interpret verbal and nonverbal communication" was rated important with an "agree" to "strongly agree" rate of 76% (M = 4.31, SD = .76) among participants.

Similar rates were found on the frequency of usage for "ability to listen", "ability to follow instructions", "ability to show a high regard for safety procedures", and "ability to speak so others can understand". The "ability to listen actively" had the highest mean frequency and overall daily and weekly agreement of 94.1% (M = 4.94, SD = .36). The "ability to follow instructions", which had the highest value-based percentage, had a higher daily and weekly frequency agreement of 97.6%, but lower mean value (M = 4.93, SD = .37). The "ability to show a high regard for safety procedures" had a weekly and daily frequency rate of 98.8% (M = 4.79, SD = .49). The "ability to speak so others can understand" had daily and weekly value of 94.1% (M = 4.76, SD = .72). There is a strong level of correlation between the value placed on these skills and their usage, with a significance of $p < .05$ across all items, except for active listening and following instructions (Table 1). However, this can be accounted for within the variance that is explored later in this section.

Two of the lowest scored skills were "ability to convey ideas in writing" and "ability to utilize a range of basic technical skills". This result suggests that while these skills may be valuable, especially dependent on career fields, they do not necessarily need to be present at the start of a work experience. Rather, the skills identified as most important are those with more collaboration and learning skills. These skills would assist a potential employee in gaining additional skills or taking on roles within an employment setting, even if they do not have certain skills. The emphasis is placed on learning, communicating, and following the directions at their employment site.

Higher order thinking skills

Higher order thinking skills covered the value placed on the ability of individuals to adapt to and manage their environment – executive functioning skills. The areas that were highlighted as most important within higher order thinking skills were "ability to manage times and priorities", "ability to recognize and correct one's own mistakes", "ability to adapt to new situations", and "ability to solve problems". Levels of agreement were based on the same 5 points scale used in the basic skills category. The skill identified as most important in the higher order thinking skills category was "ability to manage time and priorities", which includes setting timelines and coordinating tasks, with an "agree" to "strongly agree" percentage of 93.1% (M = 4.42, SD = .71). This skill puts a strong emphasis on the ability of an individual to plan and organize their environment. The "ability to recognize and correct one's own mistakes", a reflective skill, was identified as important with an "agree" to "strongly agree" percentage of 90.7% (M = 4.38, SD = .74). With regard to self-regulation, "ability to adapt to new situations" was identified as important, by participants "agreeing" or "strongly agreeing" with an agreement

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rate of 90.7% (*M* = 4.28, *SD* = .71). The "ability to solve problems" was identified as "agree" or strongly agree" by 90.7% as well, but had a lower total level of agreement, (*M* = 4.20, *SD* = .70). These higher order skills were all identified as important but were scored as less important than skills identified as basic skills, found in the preceding section.

The "ability to recognize and correct own mistakes" had a high rate of agreement (90.7%) and also had a high rate of frequency usage agreement, with 97.7% expressing either daily or weekly use of the skill (*M* = 4.74, *SD* = .54). Participants identified this as one of the most commonly used skills within higher order thinking skills. This frequency rate was nearly equal to the "ability to make sound decisions", with 94.2% of participants identifying this as a regularly used skill (*M* = 4.72, *SD* = .73). Lower, but still significant levels of agreement on the frequency was "ability to manage time and priorities (setting timelines, coordinating tasks)", with 91.9% of participants expressing agreement on the regular usage of this skill, (*M* = 4.58, *SD* = .71) and "ability to solve problems" (*M* = 4.49, *SD* = .82), with 90.7% agreeing this skill is used regularly. The frequency of these skills is very reflective of the ability of participants to manage their own space/work, executive functioning and self-regulation. The correlation between these skills and the frequency of usage, identified by participants, was found to be statistically significant, p<.05, across all items (Table 1).

Table 1: Descriptive Statistics for the Four Skill Areas.

Items	Necessary			Meaningful			Correlation
	M	SD	αs	M	SD	αs	
Basic Skills							
Ability to listen actively	4.64	0.612	0.913	4.94	0.355	0.838	-0.043
Ability to speak so others can understand	4.26	0.935	0.913	4.76	0.718	0.84	.322**
Ability to follow instructions	4.82	0.538	0.919	4.93	0.371	0.836	0.056
Ability to show high regard for safety procedures	4.67	0.603	0.924	4.79	0.488	0.841	.246*
Ability to learn new skills	4.31	0.707	0.915	4.21	0.813	0.827	.396**
Ability to interpret verbal and nonverbal communication	4.31	0.76	0.915	4.65	0.649	0.835	.293**
Higher Order Thinking Skills							
Ability to manage time and priorities	4.42	0.711	0.946	4.58	0.711	0.926	.374**
Ability to recognize and correct own mistakes	4.38	0.738	0.946	4.74	0.535	0.929	.281**
Ability to adapt to new situations	4.28	0.714	0.947	4.26	0.87	0.923	.281**
Ability to solve problems	4.2	0.7	0.946	4.49	0.822	0.924	.219*
Basic Work Skills							
Ability to be on time	4.81	0.543	0.929	4.95	0.34	0.924	0.016
Ability to follow schedules	4.76	0.427	0.924	4.92	0.385	0.922	0.17
Ability to seek help when needed	4.74	0.601	0.926	4.72	0.546	0.928	0.137
Ability to stay with a task until finished	4.69	0.599	0.923	4.85	0.473	0.923	0.163
Ability to show respect for others	4.74	0.598	0.924	4.91	0.395	0.924	0.097
Ability to accept authority	4.68	0.621	0.922	4.91	0.395	0.923	0.07
Ability to use socially acceptable language	4.69	0.673	0.926	4.9	0.435	0.923	0.128
Personal Traits							
Demonstrating personal integrity/honesty in work	4.67	0.622	0.92	4.85	0.473	906	.310**
Demonstrating responsibility in work	4.69	0.619	0.923	4.84	0.457	0.905	0.192
Ability to advocate for self	4.57	0.678	0.918	4.57	0.775	0.9	.293**
Demonstrating motivation towards work	4.55	0.68	0.913	4.7	0.704	0.898	.349**
Demonstrating confidence in work	4.41	0.761	0.91	4.59	0.742	0.9	.345**
* p < .05. ** p < .01							

Basic work skills

The basic work skills category identified skills that are necessary to any job, regardless of the field. The basic work skills identified as most important were the "ability to be on time", the "ability to follow schedules", the "ability to seek help when it was needed", the "ability to show respect for others" and the "ability to

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stay with a task until finished". The highest overall score in basic work skills was found in the "ability to be on time", with 95.9% agreement on the value of being on time for work (M = 4.81, SD = .54). The "ability to follow schedules" is another skill that is regularly practiced at school, but can still be a challenge for any student, regardless of ability; but it is also a skill that had a high level of value, with 98.9% agreeing on its value (M = 4.76, SD = .43). Both the "ability to be on time" and the "ability to follow schedules" had a high rate of agreement, but the overall score for the "ability to be on time" was rated higher due to level of agreement, with a higher rate of "strongly agree". The "ability to seek help when needed" (M = 4.74, SD = .60) and the "ability to show respect for others" (M = 4.74, SD = .60) both had high rates of agreement, 96.5% and 97.7% respectively, but their overall scores were lower, as people identified "agree" over "strongly agree" more often. Similarly, the "ability to stay with a task until finished" was also identified as extremely important, with 98.8% agreement, but with a lower emphasis placed on that agreement that lowered the overall score (M = 4.90, SD = .44). While the levels of agreement may be different, the margins of the differences so that it is clear that these skills had a high level of importance to participants and win employment and employability.

Similar to the basic work skills identified as important, the frequency rates of these skills were also identified as regularly used ("daily" or "weekly). The "ability to be on time" had a near perfect score and an agreement rate of 98.9% (M = 4.95, SD = .34). The "ability to follow schedules" also exhibited an extremely high rate of agreement, with a frequency agreement of 97.7% (M = 4.92, SD = .39). Other skills that were also rated as used frequently included the "ability to show respect for others" (M = 4.91, SD= .40), the "ability to accept authority" (M = 4.91, SD = .40), and "ability to maintain appropriate personal appearance" (M = 4.91, SD = .40). However, there were differences in the overall percent of agreement of the frequency, with showing respect and accepting authority receiving a weekly/daily agreement of 98.8%, while maintaining appropriate personal appearance only being rated at 96.5%, and not being identified at the same level in the overall importance of the skill. The "ability to use socially acceptable language" was identified as having a daily/weekly usage rate of 97.7% (M = 4.90, SD = .44). The frequency of these skills is valuable to note as they are skills addressed within a school setting, but also skills that may need increased training and support. Being on time and following schedules have long been identified as important skills, but more explicit training on the value and importance is clearly needed in employment preparation programs. There are some concerns around the correlation and significance scores reported (Table 1), but the correlation score does not decrease the value on the level of agreement. This will be analyzed within the variance section.

Personal traits

The personal traits category identified abilities or traits that were essential for employment and were most closely aligned with work ethic and effort. The traits that were identified as most important were "demonstrating responsibility in work", "demonstrating personal integrity/honesty in work", the "ability to advocate for [one's] self", and "demonstrating motivation towards one work". The trait scored highest was "demonstrating responsibility in work" (M = 4.49, SD = .62), which also had a percent agreement of 97.7%. "Demonstrating personal integrity/ honesty in work" had a slightly lower score (M = 4.67, SD = .62), but the same overall percent agreement (97.7%) when factoring both "agree" and "strongly agree". This means that while overall agreement was the same, the level of agreement (agree versus strongly agree) was higher for "responsibility". The "ability to advocate for [one's] self" was slightly lower in both score and percentage, with a percent agreement of 95.4% (M = 4.57, SD = .68). "Demonstrating motivation towards work was also scored highly (M = 4.55, SD = .68) with a percent agreement of 95.3%. These skills were scored as the most important skills, by overall score and percent agreement.

With regards to their frequency, "demonstrating personal integrity/honesty in work" was scored as employed more frequently, daily/weekly, overall, but with a lower percent agreement of 97.7% (M = 4.85, SD = .473). "Demonstrating responsibility in work" was scored with a lower overall frequency score (M = 4.84, SD = .46), but with a higher overall percent agreement of 98.8%. The differences in these uses can be explained by the emphasis placed on weekly or daily usage. "Demonstrating motivation towards work" (M = 4.70, SD = .70) had a slightly lower percent agreement on frequency, with an agreement of 94.2%. "Demonstrating confidence in work" (M = 4.59, SD = .74) was not scored as high on the traits initially identified, but its daily and weekly usage scores were high, with a percent agreement on frequency of 91.8%. All scores and correlations, except for "demonstrating responsibility in work", were found to be statistically significant (Table 1). These scores reflect the emphasis placed on the character of the individual in gaining and maintaining employment. The ability of an employee to take responsibility and to be honest were scored with a high level of agreement, on both their value and the frequency of their usage. Skills that were identified as less important were the "ability to have a personal vision and goal" and the "ability to be assertive". The "ability to be assertive" is also a skill that may develop over time as the confidence of the employee will grow with time and experience. While these skills were scored lower overall, there is a high level of value placed on the personal traits of employees.

Variance among respondents

In testing for variance, there were no significant differences found among participants based on the gender of the participants. However, variance existed based on years of service and age of the participants. Respondents with different years of service placed statistically significant different values of importance on the skill of "ability to speak so others can understand" ($F(2, 80) = 3.59$, p = .03) and different frequency value on the need for "ability to

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apply basic math" ($F(2, 59) = 3.32$, $p = .04$). Participants with 5 to 15 years of experiences placed a greater emphasis on the value and frequency of these skills. The statistically significant variance associated with respondents' age was on the frequency of "ability to make plans and work towards goals" ($F(2, 67) = 3.21$, $p = .04$). Participants under the age of 35 placed a greater emphasis on the frequency of use for this skill. An additional area that accounted for variance was found between genders regarding the value placed on "ability to read with understanding" ($F(1, 22) = 4.41$, $p = .04$) and "ability to utilize a range of basic technical skills" ($F(1, 15) = 4.74$, $p = .04$). For both items, female participants placed more focus on these skills than male participants.

Discussion

The purpose of this survey study was to identify a specific set of employability skills for curriculum development aimed to serve high school students with disabilities. Participants identified "follow instructions", "show a high regard for safety protocol", "listen actively", "learn new skills", and "interpret verbal and nonverbal communication" as most important basic skills for any employees. Previous research also identified similarly highly rated employability skills, including "follow instructions" and "show a high regard for safety protocol" [25]. Three of these five skills (listening, communication, and following directions) are about interactions with supervisors and coworkers. Being able to work with supervisors and coworkers is perceived as essential for all employees regardless of the type and level of work. Observing safety protocol and learning new skills are also necessary basic skills for any employees as they ensure workplace safety and adaptation to new development.

These findings suggest that people need to possess these basic skills in order to succeed in a work environment. Employability skills curricula and school instruction should target these skills to prepare students with disabilities for transition to employment. On the other hand, "ability to convey ideas in writing" and "ability to utilize a range of basic technical skills" received the lowest ratings, which are similar to the previous findings [25]. This finding suggests that while these skills may be valuable, especially dependent on career fields, they do not necessarily need to be present for entry-level employees. Rather, the skills identified as most important are those associated with collaboration and learning. These skills would assist a potential employee in gaining additional skills or taking on roles within an employment setting, even if they do not already possess certain skills. The emphasis is placed on learning, communicating, and following directions at their employment sites.

In the category of higher order thinking skills, participants identified "manage times and priorities", "recognize and correct one's own mistakes", "adapt to new situations", and "solve problems" as most important. It is likely that these skills are observed in most work settings and are directly related to job performance. For schools, these skills can be embedded into many curricula for teaching to students with disabilities. For example, in many self-determination curricula (e.g., ChoiceMaker and Next S.T.E.P), there are related topics on goal setting, planning, and problem-solving. Time management and social skills training can also be embedded into life skill curricula. Whereas "use of basic math", "use of technology", "use of creative thinking", and "capital management" are not frequently and directly observed in many work settings and therefore were perceived as less important. This does not mean that these skills are unimportant, but that the emphasis is placed on these other skills. The skills identified as more important also align with many of the skills that can be assessed through a self-determination assessment, such as the SDLMI, and worked on within a school setting. This suggests that a school-based employment intervention can be built on and implemented through a curriculum that support and increase these skills.

The basic work skills that were identified as most important are "be on time", "follow schedules", "seek help when it was needed", "show respect for others" and "stay with a task until finished". Again, most of these skills are directly related to job performance and can be easily observed. They are also skills that students with disabilities tend to lack and need instruction. These skills can be clearly taught in a curriculum, but also ones that schools have struggled with for years (e.g., the poor attendance level and low rates of turning in assignment). While these skills were identified as most important, it is also interesting to note that, unlike in previous sections, a high level of emphasis was placed on most of the basic work skills. This suggests that basic work skills should definitely be an area of focus in any employment curriculum or intervention [30]. On the other hand, though there were some lower scores in the need for independence, these scores do not drop significantly. Employers are looking for the ability to work with individuals who can enter the field with basic work skills, other factors like independence are important, but they can also be supported over time and through experience.

Important personal traits identified in our study included "demonstrating responsibility in work", "demonstrating personal integrity/honesty in work", "advocate for [one's] self", and "demonstrating motivation towards one work". Once again, three of the four skills (responsibility, integrity/honesty, and motivation) are directly linked to job performance. Participants of the study overwhelmingly put their emphasis on those skills that help employees perform their job duties. "Have a personal vision and goal" and "be assertive", on the other hand, were rated low, probably because they are not necessarily needed for everyone in all work settings. However, this does not mean the skill was unimportant though, just that responsibility and integrity/honesty were slightly higher. These are skills may still be needed by individuals with disabilities in certain settings and should be supported though interventions, natural employee supports, and develop over time as the confidence of the employee grow with time and experience. Working within an employment preparation

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program, as well as basic school wide supports, can assist an employee in developing many of these abilities and increasing their ability to take responsibility. School-based programs have been associated with increased employment opportunities and improved employment outcomes for students with disabilities [31].

The variance in responses among these skills suggests that rater's experiences (years of experience), age, and gender may impact the way that they scored the value of each skill. In this case, the reporting of variance is meant to help the research team understand the differences in the selection of importance and the value of time placed. The results of these surveys highlighted the high level of employability skills that would be employment for future opportunities. However, it also provided the opportunity to see what skills these participants placed the most emphasis on. It is certainly worth noting the differences in age groups and years of experience, as it also shows how different groups viewed these skills.

The results of this survey are important for a number of reasons. These are values provided by practitioners in the field of education specifically working with high school students with disabilities. These survey results need to be taken into account when developing the employability skills curriculum. For students with disabilities to be successful in their jobs in high school and shortly after, it is apparent that certain employability skills should be taught in a way that provides structure, exposure to skills, and scaffolding of those skills. According to all major stakeholders that work with students with disabilities, all of the listed skills in the survey are important for employability skill development.

It is also important to note that more and more stakeholders are recognizing that career and employability skills should be taught in high schools, since we know that many students leave high school without the needed skills to succeed in the workforce. More importantly, contributing a research-based employability curriculum will provide an opportunity for educators to serve their students better, instead of creating and locating resources for students with disabilities. Ultimately, this employability skills curriculum will provide students with disabilities better work opportunities [32].

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